Resource Controls
Engineering & Environmental Solutions

February 1, 2016

Mr. Nick Noons, Sanitary Engineer
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908

SUBJECT: Response to E-Mail Comments Dated December 23, 2015
Bay Spring Realty, Barrington, RI
RIDEM File #: SR-01-0106

Dear Mr. Noons:

Resource Control Associates, Inc. (Resource Controls) has prepared this response to your comments sent via electronic mail on December 23, 2015 (Attachment 1) regarding the above Site. A Site Plan has been included as Attachment 2.

Resource Controls is pleased to present the following responses to the December 23, 2015 RIDEM correspondence.

1. Stormwater Infiltration Diagram.

Resource Controls has reviewed the analytical data for the areas of concern (AOC) where GA Leachability exceedances exist in soil. Areas of exceedances and suspect areas with elevated levels of total metals have been provided to the architectural and civil engineering design team. Storm water design will be completed as a component of the Remedial Action Work Plan (RAWP) process. Upon identification of potential infiltration areas, a Limited Design Investigation shall be conducted to determine whether the areas are acceptable for hydraulic loading. A revised Storm Water Infiltration Diagram will then be submitted concurrently with the RAWP.

2. Vapor Intrusion Potential.

On December 17, 2015, Resource Controls collected groundwater samples from monitoring wells MW-101 through 105, MW-3 and MW-5. The samples were analyzed for volatile organic compounds (VOC) by EPA method 8260B.

The analytical results indicate low levels of VOCs remain in the southeastern portion of the site in the Cistern Area. MW-3, MW-5, MW-104 and MW-105 had detections of various VOCs above the laboratory detection limits but below the RIDEM GA Groundwater Objectives. Attachment 3 summarizes current and historical groundwater analytical results and a copy of the laboratory report is included in Attachment 4. This most recent groundwater sampling effort has delineated the extent of VOC contamination in groundwater (i.e. areas of the site where the building restrictions shall be applied – southeastern portion of the Site).

3. Polychlorinated biphenyls

On December 17, 2015, Resource Controls collected one (1) shallow soil sample, labeled HB-1, from the top six (6) inches of soil directly adjacent to the former transformer pad. The sample was analyzed for polychlorinated biphenyls (PCBs) by EPA method 8082. The analytical results indicated the presences of PCBs at a concentration of 0.294 mg/kg. This concentration is well below the RIDEM Residential Direct Exposure Criteria of 10 mg/kg. A copy of the laboratory report is included in Attachment 4.

4. Groundwater Monitoring

Quarterly groundwater monitoring will continue in the area of the former cistern (MW-3, MW-5 and MW-105) until three consecutive quarters of analytical results are below the applicable RIDEM GA Groundwater Criteria.

Resource Controls respectfully requests that the RIDEM accept our responses to the December 23, 2015 comments, and that a Program Letter be issued. If you have any questions, please do not hesitate to contact the undersigned at (401) 728-6860.

Very truly yours,

RESOURCE CONTROL ASSOCIATES, INC.

Julie V. Freshman
Senior Environmental Scientist

Attachments:	Attachment 1	Email dated December 23, 2015
	Attachment 2	Site Plan
	Attachment 3	Table 1 – Summary of Groundwater Analytical Results
	Attachment 4	Laboratory Reports

cc: Bay Spring Realty Company

ATTACHMENT 1

Email dated December 23, 2015

Julie Freshman

From: Noons, Nicholas (DEM) <nicholas.noons@dem.ri.gov>
Sent: Wednesday, December 23, 2015 3:41 PM
To: Julie Freshman
Cc: Mark House
Subject: RE: Bay Spring Realty, Barrington (SR-01-0106)

Julie,

I have included my comments regarding the SIR Addendum submitted for 90 Bay Spring Ave, Barrington that we discussed last week over the phone.

1. **Stormwater Infiltration Diagram**: The diagram provided shows concentrated hydraulic loading allowed on the entire property. The SIR Addendum claims that there are no GA Leachability exceedances in site soils, however, this is not accurate. GA Leachability exceedances are present in AOC-4 and AOC-7 for benzo(a)pyrene and TPH, respectively. In addition, elevated levels of lead were found in several AOCs and were not analyzed for TCLP. As such, the Department cannot approve of the infiltration proposal as is.

   Given the heterogeneity of the site, the best approach for stormwater may be a Limited Design Investigation (LDI) (Section 8.05 of the Remediation Regulations). An LDI is conducted during the implementation of the RAWP, at which point the stormwater design for the site would likely be complete, and would consist of sampling the overburden in areas proposed for concentrated hydraulic loading.

2. **Vapor Intrusion Potential:** The pockets of residual VOC contamination appear to be restricted to the southern portion of the site. More specifically, in the vicinity of monitoring wells MW-104, MW-105, and MW-5. However, not all of the monitoring wells at the site have been sampled for VOCs. In particular, the upland monitoring wells MW-102 and MW-103 should be sampled for VOCs in order to delineate the area where building restrictions will applied.

3. **Polychlorinated biphenyls:** The sample obtained from the test pit to the north of Stock House No. 2, TP-204, is not representative of the transformer pad. Additional sampling of the transformer pad area will be required to ensure that a release of PCBs has not occurred. This sampling should be conducted within the fenced enclosure for the pad in the top 1 foot of soil. So as not to delay the process, this can be completed concurrent with site development. Since the pad will almost certainly be removed, compliance sampling for PCBs can be written into the Remedial Approval Letter for this excavation.

4. **Groundwater Monitoring:** Groundwater monitoring cannot be suspended downgradient of the cistern area (AOC-5). Groundwater monitoring results from July 9, 2015 indicate an exceedance of TCE in MW-105 above GA Groundwater Objectives. Given the upward trend following the short-term response action, groundwater monitoring will need to continue in this area, specifically in monitoring well MW-105, in accordance with RIDEM policy.

Below is the proposed language I drafted for the remedy outlined in Program Letter. I wanted your concurrence prior to issuing the letter.

- The encapsulation of site soils that exceed the Department's Method 1 Residential Direct Exposure Criteria (RDEC) with a Department approved engineered control consisting of either two (2) feet of clean fill, one (1) foot of clean fill underlain with a geotextile fabric, four (4) inches of pavement above six (6) inches of clean subgrade, or equivalent.

- Restricting development (i.e. buildings and/or subsurface structures) in areas of the property where residual volatile organic compound (VOC) contamination has been identified in groundwater, unless said development will employ appropriate vapor intrusion mitigation technologies (e.g. sub-slab depressurization system, vapor barriers, etc.).

- Quarterly groundwater monitoring for VOCs will be conducted until three consecutive quarters of analytical results are below the applicable RIDEM GA Groundwater Criteria.

- The integrity of the cap shall be preserved through the recording of an Environmental Land Usage Restriction (ELUR) on the deed for the entire property. The ELUR shall require the performance of annual inspections to document the status of the ELUR and the condition of the engineered controls at the Site. The ELUR shall include a soil management plan (SMP), which will address post remediation activities that disturb onsite soils. The ELUR, once approved by the Department, shall be recorded for the property (Plat Map 2, Lot 154) in the Land Evidence Records for the Town of Barrington and a recorded copy forwarded back to the Department within fifteen (15) days of recording.

Have a nice holiday!

Nick

Rhode Island Department of Environmental Management
Office of Waste Management

Nicholas J. Noons
Sanitary Engineer

State of Rhode Island
Department of Environmental Management
Office of Waste Management
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Providence, RI 02908
nicholas.noons@dem.ri.gov
(401) 222-2797 ext. 7517

From: Julie Freshman [mailto:JFreshman@ResourceControls.com]
Sent: Wednesday, November 11, 2015 1:23 PM
To: Noons, Nicholas (DEM) <nicholas.noons@dem.ri.gov>
Cc: Mark House <MHouse@ResourceControls.com>
Subject: RE: Bay Spring Realty, Barrington (SR-01-0106)

Hi Nick,

Thanks for getting back to us. The approach suggested below will work for the owner. Also, in accordance with "Section 3.2.8 RISDISM Subsurface Contamination Guidance", we have looked at the soil data in relation to GA leachability exceedances and determined that there are none. We plan to include a "Stormwater Infiltration Diagram" within the SIR Addendum, designating areas on the Site according to the three types of allowable hydraulic loads (no hydraulic load - red, direct precipitation only - yellow and concentrated loading allowed - green), based on the nature and extent of contamination present at the Site. The diagram will depict the entire Site as green (concentrated hydraulic loading allowed).

Also, thanks for passing along the document on the artificial leather manufacturing process – good find!

We plan to get the SIR Addendum out to you this week.

Best Regards,

Julie

From: Noons, Nicholas (DEM) [mailto:nicholas.noons@dem.ri.gov]
Sent: Monday, November 09, 2015 4:58 PM
To: Julie Freshman
Cc: Mark House
Subject: RE: Bay Spring Realty, Barrington (SR-01-0106)

Good afternoon Julie,

Sorry for not getting back to you and Mark sooner on this matter.

The TIC analysis identified several other aromatic hydrocarbons in addition to those already detected. All the compounds detected thus far are present at low concentrations (<1 ppm) and the contamination appears to be localized. However, given the nature of these compounds and the conditions observed in the field, the potential for vapor intrusion is high.

In regards to the remedial alternative for this specific area of concern, I suggested restricting development (i.e. buildings and subsurface structures) in lieu of targeted remediation and/or vapor intrusion mitigation. This would be appropriate given the nature and extent of the contamination. The area that the restriction would apply to could be determined using the existing monitoring well network and/or refined during site development, if necessary. If the owner is not amenable to this approach or if there are any other remedial alternatives you are considering, please let me know.

Also, I thought I would share this document I came across awhile back regarding the manufacture of artificial leather (attached). It is from the era (Oct. 1921) and identifies "benzol," which is obtained from the distillation of coal tar, as a common solvent used in the process. This could be the source of the contamination given the absence of other hydrocarbons.

Nick

From: Julie Freshman [mailto:JFreshman@ResourceControls.com]
Sent: Friday, November 06, 2015 1:32 PM
To: Noons, Nicholas (DEM) <nicholas.noons@dem.ri.gov>
Cc: Mark House <MHouse@ResourceControls.com>
Subject: Bay Spring Realty, Barrington (SR-01-0106)

Hi Nick,

For Bay Spring Realty/Barrington, could you send me an email to formalize the comments you provided when I was in on Thursday, 11/29 regarding the TIC results and the recommended remedial alternative for the Site? I believe, you had stated that including a restriction on building on this part of the Site in the ELUR that is recorded would be sufficient to deal with the VOC impacts in this area. We are waiting to submit the SIR Addendum until we hear back from you.

Thanks,

Julie V. Freshman, GISP

Senior Scientist and Operations Manager

Resource Controls
Engineering & Environmental Solutions

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Pawtucket, Rhode Island 02860

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Fall River, Massachusetts 02721

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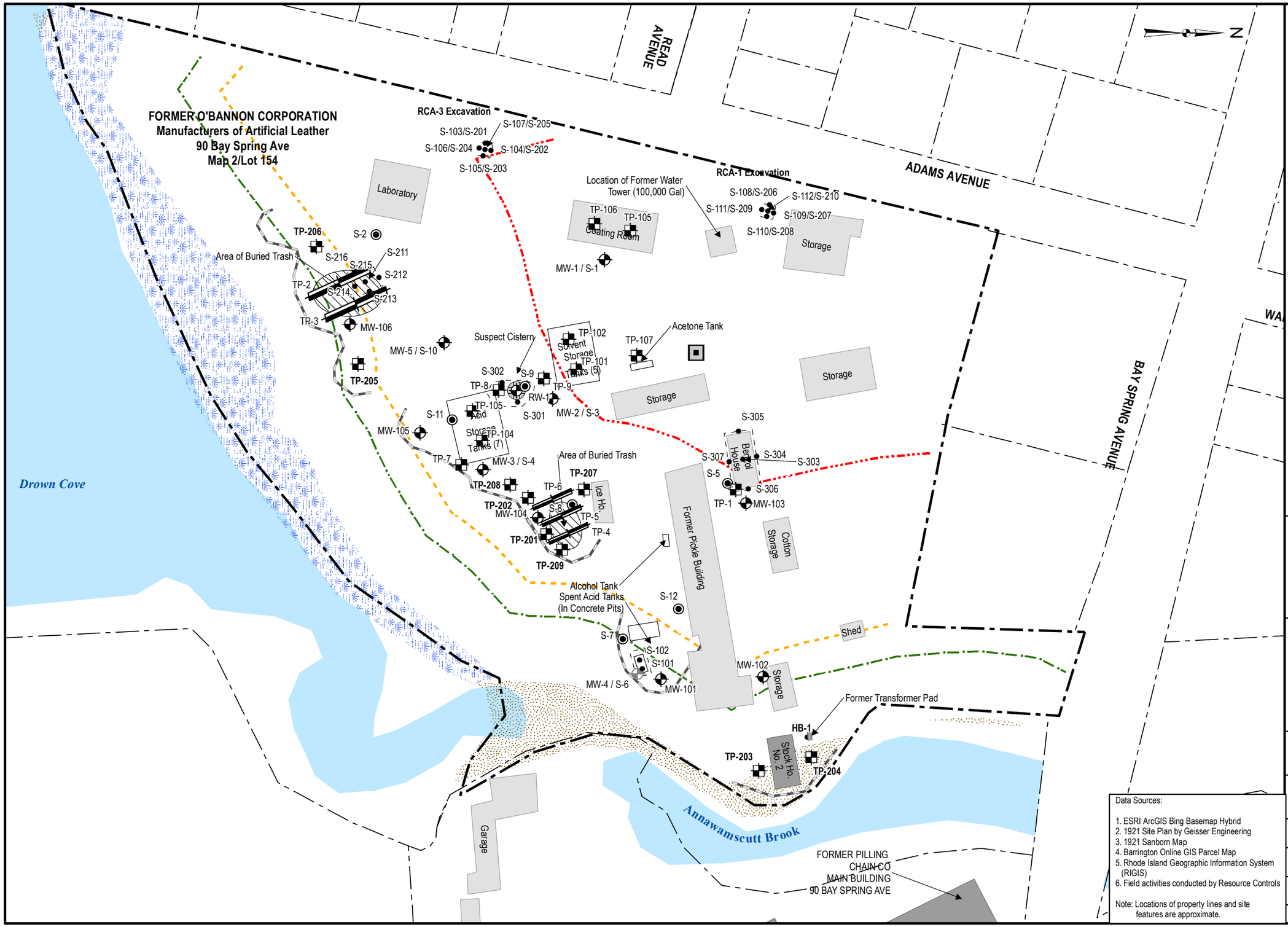
ATTACHMENT 2

Site Plan



LEGEND

- Property Line
- Existing Building
- Former Building
- Former Tank(s)
- Beach
- Salt Marsh
- Water Body
- Extent of Excavation
- Approximate 50 ft Vegetated Buffer
- Approximate 75 ft CRMC Setback
- Approximate 200 ft CRMC Juristiction
- Hydrant
- Existing Monitoring Well
- Former Monitoring Well
- Test Pit
- Soil Sample

Data Sources:

1. ESRI ArcGIS Bing Basemap Hybrid
2. 1921 Site Plan by Geisser Engineering
3. 1921 Sanborn Map
4. Barrington Online GIS Parcel Map
5. Rhode Island Geographic Information System (RIGIS)
6. Field activities conducted by Resource Controls

Note: Locations of property lines and site features are approximate.

PREPARED BY:

Resource Controls
Engineering & Environmental Solutions

DRAWING DESCRIPTION:

SITE PLAN

CLIENT:

Bay Spring Realty Co.

LOCATION:

90 BAY SPRING AVENUE
BARRINGTON, RHODE ISLAND

DESIGNED BY:	CHECKED BY:	APPROVED BY:
NRH	JVF	MJH

DRAWING DATE:	SHEET NUMBER:
07/10/2015	1 of 1

PROJECT NUMBER:	DRAWING NAME:
7131A	SITE PLAN

FIGURE 2

Path: P:\7000\7131A.00 Bay Spring realty Co., Barrington, RI\Graphics\GIS\7131A_SitePlan.mxd

ATTACHMENT 3

Table 1 – Summary of Groundwater Analytical Results

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

BAY SPRING REALTY CO.
90 BAY SPRING AVENUE
BARRINGTON, RHODE ISLAND

	AOC-1: UST Area									AOC-4: Waste Disposal Area No. 1			
Sample Identification	MW-4		MW-101					MW-102		MW-106			
Date Sampled	11/26/2012	2/13/2013	6/6/2014	10/9/2014	4/9/2015	7/9/2015	12/17/2015	6/6/2014	12/17/2015	6/6/2014	10/9/2014	4/9/2015	7/9/2015
VOLATILE ORGANIC COMPOUNDS (ug/L)													
1,1,1-Trichloroethane	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
1,1,2-Trichloroethane	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
1,1-Dichloroethene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
1,2,4-Trimethylbenzene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
1,2-Dibromo-3-Chloropropane	<5.0	--	--	--	--	--	<5.0	--	<5.0	<5.0	--	--	--
1,2-Dibromoethane (EDB)	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
1,2-Dichloroethane	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
1,3,5-Trimethylbenzene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
2-Butanone	<10	--	--	--	--	--	<10	--	<10	<10	--	--	--
2-Hexanone	<10	--	--	--	--	--	<10	--	<10	<10	--	--	--
4-Isopropyltoluene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
4-Methyl-2-Pentanone	<25	--	--	--	--	--	<25	--	<25	<25	--	--	--
Acetone	<10	--	--	--	--	--	<10	--	<10	<10	--	--	--
Benzene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Carbon Disulfide	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Carbon Tetrachloride	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Chloroethane	<2.0	--	--	--	--	--	<2.0	--	<2.0	<2.0	--	--	--
Chloroform	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
cis-1,2-Dichloroethene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Ethylbenzene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Isopropylbenzene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Methylene Chloride	<2.0	--	--	--	--	--	<2.0	--	<2.0	<2.0	--	--	--
Naphthalene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
n-Propylbenzene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
sec-Butylbenzene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Tetrachloroethene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Toluene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Trichloroethene	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Vinyl Chloride	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Xylene O	<1.0	--	--	--	--	--	<1.0	--	<1.0	<1.0	--	--	--
Xylene P,M	<2.0	--	--	--	--	--	<2.0	--	<2.0	<2.0	--	--	--
Xylenes (Total)	<3.0	--	--	--	--	--	<3.0	--	<3.0	<3.0	--	--	--
All other VOCs	ND	--	--	--	--	--	ND	--	ND	ND	--	--	--
SEMI-VOLATILE ORGANIC COMPOUNDS (ug/L)													
2,4-Dimethylphenol	<59	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol	<12	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	<12	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate	<12	--	--	--	--	--	--	--	--	--	--	--	--
Isophorone	<12	--	--	--	--	--	--	--	--	--	--	--	--
Nitrobenzene	<12	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	<12	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	< 0.21	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	< 0.21	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	< 0.21	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	0.08	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	< 0.05	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	0.1	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	<0.05	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	0.1	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	<0.21	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	<0.21	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)Pyrene	<0.05	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	<0.21	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	<1.05	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	<0.21	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	<0.21	--	--	--	--	--	--	--	--	--	--	--	--
All other SVOCs	ND	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL PETROLEUM HYDROCARBONS (mg/L)													
Diesel Range Organics [C10-C28]	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL METALS (mg/L)													
Arsenic	0.0146	0.0206	0.0807	--	--	0.102	--	0.0029	--	<0.001	--	--	<0.001
Barium	0.096	0.09	0.039	--	--	0.030	--	0.025	--	<0.025	--	--	0.032
Cadmium	<0.0025	<0.0025	<0.0025	--	--	<0.0025	--	<0.0025	--	<0.0025	--	--	<0.025
Chromium	0.01	0.021	<0.01	--	--	<0.01	--	<0.01	--	<0.01	--	--	<0.01
Lead	0.012	0.03	0.0222	--	--	<0.01	--	<0.01	--	<0.01	--	--	<0.01
Mercury	<0.0005	0.00074	<0.0002	--	--	<0.0002	--	<0.0002	--	<0.0002	--	--	<0.0002
Selenium	<0.025	<0.025	<0.025	--	--	<0.025	--	<0.025	--	<0.025	--	--	<0.025
Silver	<0.005	<0.005	<0.005	--	--	<0.005	--	<0.005	--	<0.005	--	--	<0.005
DISSOLVED METALS (mg/L)													
Arsenic	--	0.0123	0.0402	0.0342	0.009	0.059	--	0.0018	--	<0.001	<0.0025	<0.002	<0.002
Barium	--	0.046	<0.025	0.026	<0.025	<0.025	--	<0.025	--	<0.025	0.036	0.026	0.027
Cadmium	--	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	--	<0.0025	--	<0.0025	<0.0025	<0.0025	<0.0025
Chromium	--	<0.01	<0.01	<0.010	<0.01	<0.01	--	<0.01	--	<0.01	<0.010	<0.01	<0.01
Lead	--	<0.01	0.0177	<0.010	0.036	<0.01	--	<0.01	--	<0.01	<0.010	<0.01	<0.01
Mercury	--	<0.0002	<0.0002	<0.0020	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.00020	<0.0002	<0.0002
Selenium	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.025	--	<0.025	<0.025	<0.025	<0.025
Silver	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	<0.005	<0.005	<0.005	<0.005

	AOC-5: Cistern Area																			
Sample Identification	MW-3							MW-5					RW-1	MW-105					RIDEM Groundwater Objectives	
Date Sampled	11/26/2012	2/13/2013	6/6/2014	10/9/2014	4/9/2015	7/9/2015	12/17/2015	11/26/2012	6/6/2014	10/9/2014	4/9/2015	12/17/2015	5/30/2014	6/6/2014	10/9/2014	4/9/2015	7/9/2015	12/17/2015	GA Objectives	GB UCLs
VOLATILE ORGANIC COMPOUNDS (ug/L)																				
1,1,1-Trichloroethane	1.2	--	<1.0	2.1	<1.0	2.1	5.5	<1.0	<1.0	<1.0	<1.0	<1.0	43,000	2.9	33.3	23.2	19.8	7.3	200	68,000
1,1,2-Trichloroethane	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	140	<1.0	<1.0	<1.0	<1.0	<1.0	5	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	7.9	--	--	--	--	--	NS	NS
1,1-Dichloroethane	<3.0	--	<1.0	1.8	<1.0	<1.0	6.0	<1.0	<1.0	<1.0	<1.0	<1.0	25,000	14.3	26.1	7.0	3.4	2.1	NS	NS
1,1-Dichloroethene	<1.0	--	<1.0	<1.0	<1.0	1.7	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	2,900	<1.0	<1.0	<1.0	<1.0	<1.0	7	23,000
1,2,4-Trimethylbenzene	1	--	4.1	<1.0	<1.0	2.3	<1.0	4.5	3.2	1.1	1.2	1.3	--	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS
1,2-Dibromo-3-Chloropropane	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1.1	<5.0	<5.0	<5.0	<5.0	<5.0	0.2	NS
1,2-Dibromoethane (EDB)	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.05	NS
1,2-Dichloroethane	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	110	<1.0	<1.0	<1.0	<1.0	<1.0	5	670,000
1,3,5-Trimethylbenzene	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	139	79.5	8.4	37.4	39.8	--	3.1	<1.0	<1.0	<1.0	<1.0	NS	NS
2-Butanone	<10	--	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	820	<10	<10	<10	<10	<10	NS	NS
2-Hexanone	<10	--	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	29	<10	<10	<10	<10	<10	NS	NS
4-Isopropyltoluene	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	9.4	8.9	5.8	6.5	7.4	--	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS
4-Methyl-2-Pentanone	<25	--	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	130	<25	<25	<25	<25	<25	NS	NS
Acetone	102	--	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	290	<10	<10	<10	<10	<10	NS	NS
Benzene	1.1	--	3.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	120	<1.0	<1.0	<1.0	<1.0	<1.0	5	18,000
Carbon Disulfide	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS
Carbon Tetrachloride	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1,400	<1.0	<1.0	<1.0	<1.0	<1.0	5	NS
Chloroethane	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	170	<2.0	<2.0	<2.0	<2.0	<2.0	NS	NS
Chloroform	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	16	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS
cis-1,2-Dichloroethene	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	830	3.8	<1.0	<1.0	<1.0	<1.0	70	69,000
Ethylbenzene	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	7,800	<1.0	<1.0	<1.0	<1.0	<1.0	700	16,000
Isopropylbenzene	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	40	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS
Methylene Chloride	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	80	<2.0	<2.0	<2.0	<2.0	<2.0	5	NS
Naphthalene	<1.0	--	1.6	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	100	NS
n-Propylbenzene	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS
sec-Butylbenzene	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS
Tetrachloroethene	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	110	<1.0	<1.0	<1.0	<1.0	<1.0	5	NS
Toluene	1.1	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	13,000	<1.0	<1.0	<1.0	<1.0	<1.0	1,000	21,000
Trichloroethene	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	77,000	1.6	2.6	4.6	8.2	3.9	5	87,000
Vinyl Chloride	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	160	<1.0	<1.0	<1.0	<1.0	<1.0	2	NS
Xylene O	2.2	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	10,000	NS
Xylene P,M	3.6	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	10,000	NS
Xylenes (Total)	5.8	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	39,000	<3.0	<3.0	<3.0	<3.0	<3.0	NS	NS
All other VOCs	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
SEMI-VOLATILE ORGANIC COMPOUNDS (ug/L)																				
2,4-Dimethylphenol	<51	--	--	--	--	--	--	<51	--	--	--	--	61	--	--	--	--	--	NS	NS
2-Methylphenol	<10	--	--	--	--	--	--	<10	--	--	--	--	37	--	--	--	--	--	NS	NS
Acetophenone	<10	--	--	--	--	--	--	<10	--	--	--	--	85	--	--	--	--	--	NS	NS
Benzaldehyde	--	--	--	--			--	--	--	--	--	--	21	--	--	--	--	--	NS	NS
Di-n-butylphthalate	<10	--	--	--	--	--	--	<10	--	--	--	--	9.8	--	--	--	--	--	NS	NS
Isophorone	<10	--	--	--	--	--	--	<10	--	--	--	--	20	--	--	--	--	--	NS	NS
Nitrobenzene	<10	--	--	--	--	--	--	<10	--	--	--	--	110	--	--	--	--	--	NS	NS
Phenol	<10	--	--	--	--	--	--	<10	--	--	--	--	65	--	--	--	--	--	NS	NS
2-Methylnaphthalene	<0.2	--	--	--	--	--	--	2.63	--	--	--	--	<100	--	--	--	--	--	NS	NS
Acenaphthene	<0.2	--	--	--	--	--	--	0.29	--	--	--	--	<100	--	--	--	--	--	NS	NS
Acenaphthylene	0.3	--	--	--	--	--	--	<0.2	--	--	--	--	<100	--	--	--	--	--	NS	NS
Benzo(a)anthracene	<0.05	--	--	--	--	--	--	<0.05	--	--	--	--	<100	--	--	--	--	--	NS	NS
Benzo(a)pyrene	0.08	--	--	--	--	--	--	<0.05	--	--	--	--	<100	--	--	--	--	--	0.2	NS
Benzo(b)fluoranthene	0.15	--	--	--	--	--	--	<0.05	--	--	--	--	<100	--	--	--	--	--	NS	NS
Benzo(k)fluoranthene	0.05	--	--	--	--	--	--	<0.05	--	--	--	--	<100	--	--	--	--	--	NS	NS
Chrysene	0.09	--	--	--	--	--	--	<0.05	--	--	--	--	<100	--	--	--	--	--	NS	NS
Fluoranthene	<0.2	--	--	--	--	--	--	<0.2	--	--	--	--	15	--	--	--	--	--	NS	NS
Hexachlorobenzene	<0.2	--	--	--	--	--	--	<0.2	--	--	--	--	<100	--	--	--	--	--	1	NS
Indeno(1,2,3-cd)Pyrene	0.07	--	--	--	--	--	--	<0.05	--	--	--	--	<100	--	--	--	--	--	NS	NS
Naphthalene	0.62	--	--	--	--	--	--	1.27	--	--	--	--	<100	--	--	--	--	--	100	NS
Pentachlorophenol	<1.01	--	--	--	--	--	--	<1	--	--	--	--	<200	--	--	--	--	--	1	NS
Phenanthrene	<0.2	--	--	--	--	--	--	<0.2	--	--	--	--	20	--	--	--	--	--	NS	NS
Pyrene	<0.2	--	--	--	--	--	--	<0.2	--	--	--	--	9.6	--	--	--	--	--	NS	NS
All other SVOCs	ND	--	--	--	--	--	--	ND	--	--	--	--	ND	--	--	--	--	--	NS	NS
TOTAL PETROLEUM HYDROCARBONS (mg/L)																				
Diesel Range Organics [C10-C28]	--	--	--	--	--	--	--	--	--	--	--	--	8	--	--	--	--	--	NS	NS
TOTAL METALS (mg/L)																				
Arsenic	0.0065	0.0027	0.0042	--	--	0.003	--	<0.0025	<0.001	--	--	--	0.018	<0.001	--	--	--	--	0.01	NS
Barium	0.096	0.121	0.061	--	--	0.049	--	0.035	<0.025	--	--	--	0.72	<0.025	--	--	--	--	2	NS
Cadmium	<0.0025	<0.0025	<0.0025	--	--	<0.0025	--	<0.0025	<0.0025	--	--	--	0.0076	<0.0025	--	--	--	--	0.005	NS
Chromium	<0.01	<0.01	<0.01	--	--	<0.01	--	<0.01	<0.01	--	--	--	0.16	<0.01	--	--	--	--	0.1	NS
Lead	0.053	0.03	0.0198	--	--	0.01	--	<0.01	<0.01	--	--	--	1.7	<0.01	--	--	--	--	0.015	NS
Mercury	<0.0005	0.00055	<0.0002	--	--	0.00021	--	<0.0005	<0.0002	--	--	--	0.0047	<0.0002	--	--	--	--	0.002	NS
Selenium	<0.025	<0.025	<0.025	--	--	<0.025	--	<0.025	<0.025	--	--	--	<0.025	<0.025	--	--	--	--	0.05	NS
Silver	<0.005	<0.005	<0.005	--	--	<0.005	--	<0.005	<0.005	--	--	--	0.0035	<0.005	--	--	--	--	NS	NS
DISSOLVED METALS (mg/L)																				
Arsenic	--	<0.0025	0.0036	0.0052	<0.002	<0.002	--	--	<0.001	--	--	--	--	<0.001	--	--	--	--	0.01	NS
Barium	--	0.093	0.052	0.028	0.09	0.041	--	--	<0.025	--	--	--	--	<0.025	--	--	--	--	2	NS
Cadmium	--	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	--	--	<0.0025	--	--	--	--	<0.0025	--	--	--	--	0.005	NS
Chromium	--	<0.01	<0.01	<0.010	<0.01	<0.01	--	--	<0.01	--	--	--	--	<0.01	--	--	--	--	0.1	NS
Lead	--	<0.01	0.0117	<0.010	0.062	<0.01	--	--	<0.01	--	--	--	--	<0.01	--	--	--	--	0.015	NS
Mercury	--	<0.0002	<0.0002	<0.00020	<0.0002	<0.0002	--	--	<0.0002	--	--	--	--	<0.0002	--	--	--	--	0.002	NS
Selenium	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	--	<0.025	--	--	--	--	<0.025	--	--	--	--	0.05	NS
Silver	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	<0.005	--	--	--	--	<0.005	--	--	--	--	NS	NS

NOTES:
ug/L = micrograms per liter.
mg/L = milligrams per liter.
NS = No standard promulgated.
ND = Not detected above laboratory reporting limit.
-- = Not analyzed.
Bold concentrations exceed concentrations exceed laboratory reporting limits.
Red concentrations exceed the applicable RIDEM GA Groundwater Objectives.
Monitoring well destroyed during excavation activities.

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL RESUL

BAY SPRING REALTY CO.
90 BAY SPRING AVENUE
BARRINGTON, RHODE ISLAND

	AOC-6: Drum Storage Area/Benzol House		AOC-7: Waste Disposal Area No. 2					AOC-8: Acid Storage Tanks							AOC-9: Solvent Storage Tanks		AOC-10: Coating Room			
Sample Identification	MW-103		MW-104					MW-3							MW-2		MW-1		RIDEM Groundwater Objectives	
Date Sampled	6/6/2014	12/17/2015	6/6/2014	10/9/2014	4/9/2015	7/9/2015	12/17/2015	11/26/2012	2/13/2013	6/6/2014	10/9/2014	4/9/2015	7/9/2015	12/17/2015	11/26/2012	6/6/2014	11/26/2012	6/6/2014	GA Objectives	GB UCLs
VOLATILE ORGANIC COMPOUNDS (ug/L)																				
1,1,1-Trichloroethane	--	<1.0	2.7	--	--	2.7	24.1	1.2	--	<1.0	2.1	<1.0	2.1	5.5	<0.1	<1.0	<1.0	--	200	68,000
1,1,2-Trichloroethane	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	5	NS
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
1,1-Dichloroethane	--	<1.0	1.2	--	--	4.0	9.8	3.0	--	<1.0	1.8	<1.0	<1.0	6.0	<0.1	<1.0	<1.0	--	NS	NS
1,1-Dichloroethene	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	1.7	1.6	<0.1	<1.0	<1.0	--	7	23,000
1,2,4-Trimethylbenzene	--	<1.0	62.7	--	--	48.4	3.7	1.0	--	4.1	<1.0	<1.0	2.3	<1.0	<0.1	<1.0	<1.0	--	NS	NS
1,2-Dibromo-3-Chloropropane	--	<5.0	<5.0	--	--	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<5.0	<5.0	--	0.2	NS
1,2-Dibromoethane (EDB)	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	0.05	NS
1,2-Dichloroethane	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	5	670,000
1,3,5-Trimethylbenzene	--	<1.0	285	--	--	84.6	12.2	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	NS	NS
2-Butanone	--	<10	<10	--	--	<10	<10	<10	--	<10	<10	<10	<10	<10	<1.0	<10	<10	--	NS	NS
2-Hexanone	--	<10	<10	--	--	<10	<10	<10	--	<10	<10	<10	<10	<10	<1.0	<10	<10	--	NS	NS
4-Isopropyltoluene	--	<1.0	8.0	--	--	5.2	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	NS	NS
4-Methyl-2-Pentanone	--	<25	<25	--	--	<25	<25	<25	--	<25	<25	<25	<25	<25	<2.5	<25	<25	--	NS	NS
Acetone	--	<10	<10	--	--	<10	<10	102	--	<10	<10	<10	<10	<10	10.4	<10	<10	--	NS	NS
Benzene	--	<1.0	<1.0	--	--	<1.0	<1.0	1.1	--	3.4	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	5	18,000
Carbon Disulfide	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	NS	NS
Carbon Tetrachloride	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	5	NS
Chloroethane	--	<2.0	<2.0	--	--	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<0.2	<2.0	<2.0	--	NS	NS
Chloroform	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	NS	NS
cis-1,2-Dichloroethene	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	70	69,000
Ethylbenzene	--	<1.0	4.4	--	--	6.0	1.4	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	700	16,000
Isopropylbenzene	--	<1.0	3.4	--	--	3.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	NS	NS
Methylene Chloride	--	<2.0	<2.0	--	--	<2.0	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<0.2	<2.0	<2.0	--	5	NS
Naphthalene	--	<1.0	2.6	--	--	2.4	<1.0	<1.0	--	1.6	<1.0	<1.0	1.3	<1.0	<0.1	<1.0	<1.0	--	100	NS
n-Propylbenzene	--	<1.0	3.2	--	--	2.3	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	NS	NS
sec-Butylbenzene	--	<1.0	1.8	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	NS	NS
Tetrachloroethene	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	5	NS
Toluene	--	<1.0	<1.0	--	--	1.3	<1.0	1.1	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	1,000	21,000
Trichloroethene	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	5	87,000
Vinyl Chloride	--	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<1.0	--	2	NS
Xylene O	--	<1.0	5.2	--	--	5.9	<1.0	2.2	--	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	--	10,000	NS
Xylene P,M	--	<2.0	27.9	--	--	27.6	<2.0	3.6	--	<2.0	<2.0	<2.0	<2.0	<2.0	<0.2	<2.0	<2.0	--	10,000	NS
Xylenes (Total)	--	<3.0	33	--	--	33.5	<3.0	5.8	--	<3.0	<3.0	<3.0	<3.0	<3.0	<0.3	<3.0	<3.0	--	NS	NS
All other VOCs	--	ND	ND	--	--	ND	ND	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
SEMI-VOLATILE ORGANIC COMPOUNDS (ug/L)																				
2,4-Dimethylphenol	--	--	--	--	--	--	--	<51	--	--	--	--	--	--	--	--	--	--	NS	NS
2-Methylphenol	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	NS	NS
Acetophenone	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	NS	NS
Benzaldehyde	--	--	--	--	--	--	--	--	--	--	--			--	--	--	--	--	NS	NS
Di-n-butylphthalate	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	NS	NS
Isophorone	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	NS	NS
Nitrobenzene	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	NS	NS
Phenol	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	NS	NS
2-Methylnaphthalene	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	--	NS	NS
Acenaphthene	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	--	NS	NS
Acenaphthylene	--	--	--	--	--	--	--	0.3	--	--	--	--	--	--	--	--	--	--	NS	NS
Benzo(a)anthracene	--	--	--	--	--	--	--	<0.05	--	--	--	--	--	--	--	--	--	--	NS	NS
Benzo(a)pyrene	--	--	--	--	--	--	--	0.08	--	--	--	--	--	--	--	--	--	--	0.2	NS
Benzo(b)fluoranthene	--	--	--	--	--	--	--	0.15	--	--	--	--	--	--	--	--	--	--	NS	NS
Benzo(k)fluoranthene	--	--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--	--	NS	NS
Chrysene	--	--	--	--	--	--	--	0.09	--	--	--	--	--	--	--	--	--	--	NS	NS
Fluoranthene	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	--	NS	NS
Hexachlorobenzene	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	--	1	NS
Indeno(1,2,3-cd)Pyrene	--	--	--	--	--	--	--	0.07	--	--	--	--	--	--	--	--	--	--	NS	NS
Naphthalene	--	--	--	--	--	--	--	0.62	--	--	--	--	--	--	--	--	--	--	100	NS
Pentachlorophenol	--	--	--	--	--	--	--	<1.01	--	--	--	--	--	--	--	--	--	--	1	NS
Phenanthrene	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	--	NS	NS
Pyrene	--	--	--	--	--	--	--	<0.2	--	--	--	--	--	--	--	--	--	--	NS	NS
All other SVOCs	--	--	--	--	--	--	--	ND	--	--	--	--	--	--	--	--	--	--	NS	NS
TOTAL PETROLEUM HYDROCARBONS (mg/L)																				
Diesel Range Organics [C10-C28]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	NS
TOTAL METALS (mg/L)																				
Arsenic	<0.001	--	<0.001	--	--	0.003	--	0.0065	0.0027	0.0042	--	--	0.003	--	--	<0.001	--	<0.001	0.01	NS
Barium	0.034	--	<0.025	--	--	<0.025	--	0.096	0.121	0.061	--	--	0.049	--	--	0.035	--	<0.025	2	NS
Cadmium	<0.0025	--	<0.0025	--	--	<0.0025	--	<0.0025	<0.0025	<0.0025	--	--	<0.0025	--	--	<0.0025	--	<0.0025	0.005	NS
Chromium	<0.01	--	<0.01	--	--	<0.01	--	<0.01	<0.01	<0.01	--	--	<0.01	--	--	<0.01	--	<0.01	0.1	NS
Lead	<0.01	--	<0.01	--	--	<0.01	--	0.053	0.03	0.0198	--	--	0.01	--	--	<0.01	--	<0.01	0.015	NS
Mercury	<0.0002	--	<0.0002	--	--	<0.0002	--	<0.0005	0.00055	<0.0002	--	--	0.00021	--	--	<0.0002	--	<0.0002	0.002	NS
Selenium	<0.025	--	<0.025	--	--	<0.025	--	<0.025	<0.025	<0.025	--	--	<0.025	--	--	<0.025	--	<0.025	0.05	NS
Silver	<0.005	--	<0.005	--	--	<0.005	--	<0.005	<0.005	<0.005	--	--	<0.005	--	--	<0.005	--	<0.005	NS	NS
DISSOLVED METALS (mg/L)																				
Arsenic	<0.001	--	<0.001	<0.0025	<0.002	<0.002	--	--	<0.0025	0.0036	0.0052	<0.002	<0.002	--	--	<0.001	--	<0.001	0.01	NS
Barium	0.028	--	<0.025	<0.025	<0.025	<0.025	--	--	0.093	0.052	0.028	0.09	0.041	--	--	0.028	--	<0.025	2	NS
Cadmium	<0.0025	--	<0.0025	<0.0025	<0.0025	<0.0025	--	--	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	--	--	<0.0025	--	<0.0025	0.005	NS
Chromium	<0.01	--	<0.01	<0.010	<0.01	<0.01	--	--	<0.01	<0.01	<0.010	<0.01	<0.01	--	--	<0.01	--	<0.01	0.1	NS
Lead	<0.01	--	<0.01	<0.010	<0.01	<0.01	--	--	<0.01	0.0117	<0.010	0.062	<0.01	--	--	<0.01	--	<0.01	0.015	NS
Mercury	<0.0002	--	<0.0002	<0.00020	<0.0002	<0.0002	--	--	<0.0002	<0.0002	<0.00020	<0.0002	<0.0002	--	--	<0.0002	--	<0.0002	0.002	NS
Selenium	<0.025	--	<0.025	<0.025	<0.025	<0.025	--	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	--	<0.025	--	<0.025	0.05	NS
Silver	<0.005	--	<0.005	<0.005	<0.005	<0.005	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	<0.005	--	<0.005	NS	NS

NOTES:
ug/L = micrograms per liter.
mg/L = milligrams per liter.
NS = No standard promulgated.
ND = Not detected above laboratory reporting limit.
-- = Not analyzed.
Bold concentrations exceed concentrations exceed labora
Red concentrations exceed the applicable RIDEM GA Gr
Monitoring well destroyed during excavation activities.

ATTACHMENT 4

Laboratory Reports

CERTIFICATE OF ANALYSIS

Julie Freshman
Resource Controls
474 Broadway
Pawtucket, RI 02860-1377

RE: Bay Spring Ave (7131A)
ESS Laboratory Work Order Number: 1512488

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 3:52 pm, Dec 28, 2015

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

SAMPLE RECEIPT

The following samples were received on December 17, 2015 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1512488-01	MW-102	Ground Water	8260B
1512488-02	MW-103	Ground Water	8260B
1512488-03	MW-101	Ground Water	8260B
1512488-04	MW-104	Ground Water	8260B
1512488-05	MW-3	Ground Water	8260B
1512488-06	MW-105	Ground Water	8260B
1512488-07	MW-5	Ground Water	8260B

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

PROJECT NARRATIVE

8260B Volatile Organic Compounds
CYL0331-CCV1 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
1,4-Dioxane - Screen (64% @ 30%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-102
Date Sampled: 12/17/15 09:50
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,1-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,1-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,1-Dichloropropene	ND (0.0020)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,2-Dibromoethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,2-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,3-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1,4-Dioxane - Screen	ND (0.500)		8260B		1	12/22/15 4:18	CYL0313	CL52139
1-Chlorohexane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
2,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
2-Butanone	ND (0.0100)		8260B		1	12/22/15 4:18	CYL0313	CL52139
2-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
2-Hexanone	ND (0.0100)		8260B		1	12/22/15 4:18	CYL0313	CL52139
4-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
4-Isopropyltoluene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Acetone	ND (0.0100)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Benzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-102
Date Sampled: 12/17/15 09:50
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromobenzene	ND (0.0020)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Bromochloromethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Bromodichloromethane	ND (0.0006)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Bromoform	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Bromomethane	ND (0.0020)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Carbon Disulfide	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Carbon Tetrachloride	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Chlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Chloroethane	ND (0.0020)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Chloroform	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Chloromethane	ND (0.0020)		8260B		1	12/22/15 4:18	CYL0313	CL52139
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Dibromochloromethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Dibromomethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Dichlorodifluoromethane	ND (0.0020)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Diethyl Ether	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Di-isopropyl ether	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Ethylbenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Hexachlorobutadiene	ND (0.0006)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Hexachloroethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Isopropylbenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Methylene Chloride	ND (0.0020)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Naphthalene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
n-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
n-Propylbenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
sec-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Styrene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
tert-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-102
Date Sampled: 12/17/15 09:50
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Tetrachloroethene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Tetrahydrofuran	ND (0.0050)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Toluene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Trichloroethene	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Trichlorofluoromethane	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Vinyl Acetate	ND (0.0050)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Vinyl Chloride	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Xylene O	ND (0.0010)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Xylene P,M	ND (0.0020)		8260B		1	12/22/15 4:18	CYL0313	CL52139
Xylenes (Total)	ND (0.0020)		8260B		1	12/22/15 4:18		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			12/22/15 4:18		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*113 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*111 %*		*70-130*
Surrogate: Dibromofluoromethane	*117 %*		*70-130*
Surrogate: Toluene-d8	*124 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-103
Date Sampled: 12/17/15 12:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,1-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,1-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,1-Dichloropropene	ND (0.0020)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,2-Dibromoethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,2-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,3-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1,4-Dioxane - Screen	ND (0.500)		8260B		1	12/22/15 4:45	CYL0313	CL52139
1-Chlorohexane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
2,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
2-Butanone	ND (0.0100)		8260B		1	12/22/15 4:45	CYL0313	CL52139
2-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
2-Hexanone	ND (0.0100)		8260B		1	12/22/15 4:45	CYL0313	CL52139
4-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
4-Isopropyltoluene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Acetone	ND (0.0100)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Benzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-103
Date Sampled: 12/17/15 12:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromobenzene	ND (0.0020)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Bromochloromethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Bromodichloromethane	ND (0.0006)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Bromoform	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Bromomethane	ND (0.0020)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Carbon Disulfide	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Carbon Tetrachloride	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Chlorobenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Chloroethane	ND (0.0020)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Chloroform	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Chloromethane	ND (0.0020)		8260B		1	12/22/15 4:45	CYL0313	CL52139
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Dibromochloromethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Dibromomethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Dichlorodifluoromethane	ND (0.0020)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Diethyl Ether	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Di-isopropyl ether	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Ethylbenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Hexachlorobutadiene	ND (0.0006)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Hexachloroethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Isopropylbenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Methylene Chloride	ND (0.0020)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Naphthalene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
n-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
n-Propylbenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
sec-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Styrene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
tert-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-103
Date Sampled: 12/17/15 12:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Tetrachloroethene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Tetrahydrofuran	ND (0.0050)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Toluene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Trichloroethene	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Trichlorofluoromethane	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Vinyl Acetate	ND (0.0050)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Vinyl Chloride	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Xylene O	ND (0.0010)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Xylene P,M	ND (0.0020)		8260B		1	12/22/15 4:45	CYL0313	CL52139
Xylenes (Total)	ND (0.0020)		8260B		1	12/22/15 4:45		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			12/22/15 4:45		[CALC]

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*110 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*109 %*		*70-130*
Surrogate: Dibromofluoromethane	*120 %*		*70-130*
Surrogate: Toluene-d8	*122 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-101
Date Sampled: 12/17/15 10:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,1-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,1-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,1-Dichloropropene	ND (0.0020)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,2-Dibromoethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,2-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,3-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1,4-Dioxane - Screen	ND (0.500)		8260B		1	12/22/15 15:27	CYL0331	CL52243
1-Chlorohexane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
2,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
2-Butanone	ND (0.0100)		8260B		1	12/22/15 15:27	CYL0331	CL52243
2-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
2-Hexanone	ND (0.0100)		8260B		1	12/22/15 15:27	CYL0331	CL52243
4-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
4-Isopropyltoluene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Acetone	ND (0.0100)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Benzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-101
Date Sampled: 12/17/15 10:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromobenzene	ND (0.0020)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Bromochloromethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Bromodichloromethane	ND (0.0006)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Bromoform	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Bromomethane	ND (0.0020)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Carbon Disulfide	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Carbon Tetrachloride	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Chlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Chloroethane	ND (0.0020)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Chloroform	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Chloromethane	ND (0.0020)		8260B		1	12/22/15 15:27	CYL0331	CL52243
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Dibromochloromethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Dibromomethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Dichlorodifluoromethane	ND (0.0020)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Diethyl Ether	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Di-isopropyl ether	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Ethylbenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Hexachlorobutadiene	ND (0.0006)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Hexachloroethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Isopropylbenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Methylene Chloride	ND (0.0020)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Naphthalene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
n-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
n-Propylbenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
sec-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Styrene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
tert-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-101
Date Sampled: 12/17/15 10:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Tetrachloroethene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Tetrahydrofuran	ND (0.0050)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Toluene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Trichloroethene	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Trichlorofluoromethane	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Vinyl Acetate	ND (0.0050)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Vinyl Chloride	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Xylene O	ND (0.0010)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Xylene P,M	ND (0.0020)		8260B		1	12/22/15 15:27	CYL0331	CL52243
Xylenes (Total)	ND (0.0020)		8260B		1	12/22/15 15:27		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			12/22/15 15:27		[CALC]

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*108 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*109 %*		*70-130*
Surrogate: Dibromofluoromethane	*113 %*		*70-130*
Surrogate: Toluene-d8	*116 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-104
Date Sampled: 12/17/15 10:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-04
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,1,1-Trichloroethane	**0.0241** (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,1-Dichloroethane	**0.0098** (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,1-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,1-Dichloropropene	ND (0.0020)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,2,4-Trimethylbenzene	**0.0037** (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,2-Dibromoethane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,2-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,3,5-Trimethylbenzene	**0.0122** (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,3-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1,4-Dioxane - Screen	ND (0.500)		8260B		1	12/22/15 15:53	CYL0331	CL52243
1-Chlorohexane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
2,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
2-Butanone	ND (0.0100)		8260B		1	12/22/15 15:53	CYL0331	CL52243
2-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
2-Hexanone	ND (0.0100)		8260B		1	12/22/15 15:53	CYL0331	CL52243
4-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
4-Isopropyltoluene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Acetone	ND (0.0100)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Benzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-104
Date Sampled: 12/17/15 10:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-04
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromobenzene	ND (0.0020)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Bromochloromethane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Bromodichloromethane	ND (0.0006)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Bromoform	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Bromomethane	ND (0.0020)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Carbon Disulfide	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Carbon Tetrachloride	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Chlorobenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Chloroethane	ND (0.0020)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Chloroform	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Chloromethane	ND (0.0020)		8260B		1	12/22/15 15:53	CYL0331	CL52243
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Dibromochloromethane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Dibromomethane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Dichlorodifluoromethane	ND (0.0020)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Diethyl Ether	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Di-isopropyl ether	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Ethylbenzene	**0.0014** (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Hexachlorobutadiene	ND (0.0006)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Hexachloroethane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Isopropylbenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Methylene Chloride	ND (0.0020)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Naphthalene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
n-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
n-Propylbenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
sec-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Styrene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
tert-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-104
Date Sampled: 12/17/15 10:45
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-04
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Tetrachloroethene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Tetrahydrofuran	ND (0.0050)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Toluene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Trichloroethene	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Trichlorofluoromethane	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Vinyl Acetate	ND (0.0050)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Vinyl Chloride	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Xylene O	ND (0.0010)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Xylene P,M	ND (0.0020)		8260B		1	12/22/15 15:53	CYL0331	CL52243
Xylenes (Total)	ND (0.0020)		8260B		1	12/22/15 15:53		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			12/22/15 15:53		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*105 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*118 %*		*70-130*
Surrogate: Dibromofluoromethane	*106 %*		*70-130*
Surrogate: Toluene-d8	*113 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-3
Date Sampled: 12/17/15 11:50
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-05
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,1,1-Trichloroethane	**0.0055** (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,1-Dichloroethane	**0.0060** (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,1-Dichloroethene	**0.0016** (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,1-Dichloropropene	ND (0.0020)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,2-Dibromoethane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,2-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,3-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1,4-Dioxane - Screen	ND (0.500)		8260B		1	12/22/15 16:21	CYL0331	CL52243
1-Chlorohexane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
2,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
2-Butanone	ND (0.0100)		8260B		1	12/22/15 16:21	CYL0331	CL52243
2-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
2-Hexanone	ND (0.0100)		8260B		1	12/22/15 16:21	CYL0331	CL52243
4-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
4-Isopropyltoluene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Acetone	ND (0.0100)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Benzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-3
Date Sampled: 12/17/15 11:50
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-05
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromobenzene	ND (0.0020)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Bromochloromethane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Bromodichloromethane	ND (0.0006)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Bromoform	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Bromomethane	ND (0.0020)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Carbon Disulfide	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Carbon Tetrachloride	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Chlorobenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Chloroethane	ND (0.0020)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Chloroform	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Chloromethane	ND (0.0020)		8260B		1	12/22/15 16:21	CYL0331	CL52243
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Dibromochloromethane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Dibromomethane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Dichlorodifluoromethane	ND (0.0020)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Diethyl Ether	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Di-isopropyl ether	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Ethylbenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Hexachlorobutadiene	ND (0.0006)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Hexachloroethane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Isopropylbenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Methylene Chloride	ND (0.0020)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Naphthalene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
n-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
n-Propylbenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
sec-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Styrene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
tert-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-3
Date Sampled: 12/17/15 11:50
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-05
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Tetrachloroethene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Tetrahydrofuran	ND (0.0050)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Toluene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Trichloroethene	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Trichlorofluoromethane	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Vinyl Acetate	ND (0.0050)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Vinyl Chloride	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Xylene O	ND (0.0010)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Xylene P,M	ND (0.0020)		8260B		1	12/22/15 16:21	CYL0331	CL52243
Xylenes (Total)	ND (0.0020)		8260B		1	12/22/15 16:21		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			12/22/15 16:21		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*105 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*115 %*		*70-130*
Surrogate: Dibromofluoromethane	*109 %*		*70-130*
Surrogate: Toluene-d8	*117 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-105
Date Sampled: 12/17/15 12:30
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-06
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,1,1-Trichloroethane	**0.0073** (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,1-Dichloroethane	**0.0021** (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,1-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,1-Dichloropropene	ND (0.0020)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,2-Dibromoethane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,2-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,3-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1,4-Dioxane - Screen	ND (0.500)		8260B		1	12/22/15 8:44	CYL0313	CL52139
1-Chlorohexane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
2,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
2-Butanone	ND (0.0100)		8260B		1	12/22/15 8:44	CYL0313	CL52139
2-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
2-Hexanone	ND (0.0100)		8260B		1	12/22/15 8:44	CYL0313	CL52139
4-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
4-Isopropyltoluene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Acetone	ND (0.0100)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Benzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-105
Date Sampled: 12/17/15 12:30
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-06
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromobenzene	ND (0.0020)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Bromochloromethane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Bromodichloromethane	ND (0.0006)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Bromoform	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Bromomethane	ND (0.0020)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Carbon Disulfide	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Carbon Tetrachloride	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Chlorobenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Chloroethane	ND (0.0020)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Chloroform	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Chloromethane	ND (0.0020)		8260B		1	12/22/15 8:44	CYL0313	CL52139
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Dibromochloromethane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Dibromomethane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Dichlorodifluoromethane	ND (0.0020)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Diethyl Ether	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Di-isopropyl ether	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Ethylbenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Hexachlorobutadiene	ND (0.0006)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Hexachloroethane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Isopropylbenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Methylene Chloride	ND (0.0020)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Naphthalene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
n-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
n-Propylbenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
sec-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Styrene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
tert-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-105
Date Sampled: 12/17/15 12:30
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-06
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Tetrachloroethene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Tetrahydrofuran	ND (0.0050)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Toluene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Trichloroethene	**0.0039** (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Trichlorofluoromethane	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Vinyl Acetate	ND (0.0050)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Vinyl Chloride	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Xylene O	ND (0.0010)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Xylene P,M	ND (0.0020)		8260B		1	12/22/15 8:44	CYL0313	CL52139
Xylenes (Total)	ND (0.0020)		8260B		1	12/22/15 8:44		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			12/22/15 8:44		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*112 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*111 %*		*70-130*
Surrogate: Dibromofluoromethane	*117 %*		*70-130*
Surrogate: Toluene-d8	*125 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-5
Date Sampled: 12/17/15 12:55
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-07
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,1-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,1-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,1-Dichloropropene	ND (0.0020)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,2,4-Trimethylbenzene	**0.0013** (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,2-Dibromoethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,2-Dichloroethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,3,5-Trimethylbenzene	**0.0398** (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,3-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1,4-Dioxane - Screen	ND (0.500)		8260B		1	12/22/15 9:11	CYL0313	CL52139
1-Chlorohexane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
2,2-Dichloropropane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
2-Butanone	ND (0.0100)		8260B		1	12/22/15 9:11	CYL0313	CL52139
2-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
2-Hexanone	ND (0.0100)		8260B		1	12/22/15 9:11	CYL0313	CL52139
4-Chlorotoluene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
4-Isopropyltoluene	**0.0074** (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Acetone	ND (0.0100)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Benzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-5
Date Sampled: 12/17/15 12:55
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-07
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromobenzene	ND (0.0020)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Bromochloromethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Bromodichloromethane	ND (0.0006)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Bromoform	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Bromomethane	ND (0.0020)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Carbon Disulfide	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Carbon Tetrachloride	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Chlorobenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Chloroethane	ND (0.0020)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Chloroform	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Chloromethane	ND (0.0020)		8260B		1	12/22/15 9:11	CYL0313	CL52139
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Dibromochloromethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Dibromomethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Dichlorodifluoromethane	ND (0.0020)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Diethyl Ether	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Di-isopropyl ether	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Ethylbenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Hexachlorobutadiene	ND (0.0006)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Hexachloroethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Isopropylbenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Methylene Chloride	ND (0.0020)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Naphthalene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
n-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
n-Propylbenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
sec-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Styrene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
tert-Butylbenzene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: MW-5
Date Sampled: 12/17/15 12:55
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1512488
ESS Laboratory Sample ID: 1512488-07
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Tetrachloroethene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Tetrahydrofuran	ND (0.0050)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Toluene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Trichloroethene	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Trichlorofluoromethane	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Vinyl Acetate	ND (0.0050)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Vinyl Chloride	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Xylene O	ND (0.0010)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Xylene P,M	ND (0.0020)		8260B		1	12/22/15 9:11	CYL0313	CL52139
Xylenes (Total)	ND (0.0020)		8260B		1	12/22/15 9:11		[CALC]
Trihalomethanes (Total)	ND (0.0010)		8260B			12/22/15 9:11		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*111 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*117 %*		*70-130*
Surrogate: Dibromofluoromethane	*118 %*		*70-130*
Surrogate: Toluene-d8	*119 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52139 - 5030B										
Blank										
1,1,1,2-Tetrachloroethane	ND	0.0010	mg/L							
1,1,1-Trichloroethane	ND	0.0010	mg/L							
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,2-Trichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethene	ND	0.0010	mg/L							
1,1-Dichloropropene	ND	0.0020	mg/L							
1,2,3-Trichlorobenzene	ND	0.0010	mg/L							
1,2,3-Trichloropropane	ND	0.0010	mg/L							
1,2,4-Trichlorobenzene	ND	0.0010	mg/L							
1,2,4-Trimethylbenzene	ND	0.0010	mg/L							
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/L							
1,2-Dibromoethane	ND	0.0010	mg/L							
1,2-Dichlorobenzene	ND	0.0010	mg/L							
1,2-Dichloroethane	ND	0.0010	mg/L							
1,2-Dichloropropane	ND	0.0010	mg/L							
1,3,5-Trimethylbenzene	ND	0.0010	mg/L							
1,3-Dichlorobenzene	ND	0.0010	mg/L							
1,3-Dichloropropane	ND	0.0010	mg/L							
1,4-Dichlorobenzene	ND	0.0010	mg/L							
1,4-Dioxane - Screen	ND	0.500	mg/L							
1-Chlorohexane	ND	0.0010	mg/L							
2,2-Dichloropropane	ND	0.0010	mg/L							
2-Butanone	ND	0.0100	mg/L							
2-Chlorotoluene	ND	0.0010	mg/L							
2-Hexanone	ND	0.0100	mg/L							
4-Chlorotoluene	ND	0.0010	mg/L							
4-Isopropyltoluene	ND	0.0010	mg/L							
4-Methyl-2-Pentanone	ND	0.0250	mg/L							
Acetone	ND	0.0100	mg/L							
Benzene	ND	0.0010	mg/L							
Bromobenzene	ND	0.0020	mg/L							
Bromochloromethane	ND	0.0010	mg/L							
Bromodichloromethane	ND	0.0006	mg/L							
Bromoform	ND	0.0010	mg/L							
Bromomethane	ND	0.0020	mg/L							
Carbon Disulfide	ND	0.0010	mg/L							
Carbon Tetrachloride	ND	0.0010	mg/L							
Chlorobenzene	ND	0.0010	mg/L							
Chloroethane	ND	0.0020	mg/L							
Chloroform	ND	0.0010	mg/L							
Chloromethane	ND	0.0020	mg/L							
cis-1,2-Dichloroethene	ND	0.0010	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52139 - 5030B										
cis-1,3-Dichloropropene	ND	0.0004	mg/L							
Dibromochloromethane	ND	0.0010	mg/L							
Dibromomethane	ND	0.0010	mg/L							
Dichlorodifluoromethane	ND	0.0020	mg/L							
Diethyl Ether	ND	0.0010	mg/L							
Di-isopropyl ether	ND	0.0010	mg/L							
Ethyl tertiary-butyl ether	ND	0.0010	mg/L							
Ethylbenzene	ND	0.0010	mg/L							
Hexachlorobutadiene	ND	0.0006	mg/L							
Hexachloroethane	ND	0.0010	mg/L							
Isopropylbenzene	ND	0.0010	mg/L							
Methyl tert-Butyl Ether	ND	0.0010	mg/L							
Methylene Chloride	ND	0.0020	mg/L							
Naphthalene	ND	0.0010	mg/L							
n-Butylbenzene	ND	0.0010	mg/L							
n-Propylbenzene	ND	0.0010	mg/L							
sec-Butylbenzene	ND	0.0010	mg/L							
Styrene	ND	0.0010	mg/L							
tert-Butylbenzene	ND	0.0010	mg/L							
Tertiary-amyl methyl ether	ND	0.0010	mg/L							
Tetrachloroethene	ND	0.0010	mg/L							
Tetrahydrofuran	ND	0.0050	mg/L							
Toluene	ND	0.0010	mg/L							
trans-1,2-Dichloroethene	ND	0.0010	mg/L							
trans-1,3-Dichloropropene	ND	0.0004	mg/L							
Trichloroethene	ND	0.0010	mg/L							
Trichlorofluoromethane	ND	0.0010	mg/L							
Trihalomethanes (Total)	ND	0.0010	mg/L							
Vinyl Acetate	ND	0.0050	mg/L							
Vinyl Chloride	ND	0.0010	mg/L							
Xylene O	ND	0.0010	mg/L							
Xylene P,M	ND	0.0020	mg/L							
Xylenes (Total)	ND	0.0020	mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0281*		mg/L	*0.02500*		*113*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0287*		mg/L	*0.02500*		*115*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0280*		mg/L	*0.02500*		*112*	*70-130*			
Surrogate: Toluene-d8	*0.0301*		mg/L	*0.02500*		*120*	*70-130*			
LCS										
1,1,1,2-Tetrachloroethane	9.30		ug/L	10.00		93	70-130			
1,1,1-Trichloroethane	11.2		ug/L	10.00		112	70-130			
1,1,2,2-Tetrachloroethane	10.6		ug/L	10.00		106	70-130			
1,1,2-Trichloroethane	9.62		ug/L	10.00		96	70-130			
1,1-Dichloroethane	11.5		ug/L	10.00		115	70-130			
1,1-Dichloroethene	12.4		ug/L	10.00		124	70-130			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52139 - 5030B										
1,1-Dichloropropene	10.9		ug/L	10.00		109	70-130			
1,2,3-Trichlorobenzene	12.7		ug/L	10.00		127	70-130			
1,2,3-Trichloropropane	10.1		ug/L	10.00		101	70-130			
1,2,4-Trichlorobenzene	12.5		ug/L	10.00		125	70-130			
1,2,4-Trimethylbenzene	10.6		ug/L	10.00		106	70-130			
1,2-Dibromo-3-Chloropropane	9.22		ug/L	10.00		92	70-130			
1,2-Dibromoethane	9.61		ug/L	10.00		96	70-130			
1,2-Dichlorobenzene	10.6		ug/L	10.00		106	70-130			
1,2-Dichloroethane	11.6		ug/L	10.00		116	70-130			
1,2-Dichloropropane	10.8		ug/L	10.00		108	70-130			
1,3,5-Trimethylbenzene	11.6		ug/L	10.00		116	70-130			
1,3-Dichlorobenzene	10.7		ug/L	10.00		107	70-130			
1,3-Dichloropropane	10.1		ug/L	10.00		101	70-130			
1,4-Dichlorobenzene	10.6		ug/L	10.00		106	70-130			
1,4-Dioxane - Screen	392		ug/L	200.0		196	0-332			
1-Chlorohexane	10.3		ug/L	10.00		103	70-130			
2,2-Dichloropropane	9.68		ug/L	10.00		97	70-130			
2-Butanone	57.6		ug/L	50.00		115	70-130			
2-Chlorotoluene	11.0		ug/L	10.00		110	70-130			
2-Hexanone	58.1		ug/L	50.00		116	70-130			
4-Chlorotoluene	11.8		ug/L	10.00		118	70-130			
4-Isopropyltoluene	11.3		ug/L	10.00		113	70-130			
4-Methyl-2-Pentanone	55.2		ug/L	50.00		110	70-130			
Acetone	55.8		ug/L	50.00		112	70-130			
Benzene	11.0		ug/L	10.00		110	70-130			
Bromobenzene	10.2		ug/L	10.00		102	70-130			
Bromochloromethane	10.3		ug/L	10.00		103	70-130			
Bromodichloromethane	11.2		ug/L	10.00		112	70-130			
Bromoform	7.50		ug/L	10.00		75	70-130			
Bromomethane	8.28		ug/L	10.00		83	70-130			
Carbon Disulfide	10.7		ug/L	10.00		107	70-130			
Carbon Tetrachloride	10.6		ug/L	10.00		106	70-130			
Chlorobenzene	10.3		ug/L	10.00		103	70-130			
Chloroethane	8.24		ug/L	10.00		82	70-130			
Chloroform	11.4		ug/L	10.00		114	70-130			
Chloromethane	9.56		ug/L	10.00		96	70-130			
cis-1,2-Dichloroethene	11.3		ug/L	10.00		113	70-130			
cis-1,3-Dichloropropene	9.55		ug/L	10.00		96	70-130			
Dibromochloromethane	8.60		ug/L	10.00		86	70-130			
Dibromomethane	10.1		ug/L	10.00		101	70-130			
Dichlorodifluoromethane	10.2		ug/L	10.00		102	70-130			
Diethyl Ether	10.7		ug/L	10.00		107	70-130			
Di-isopropyl ether	11.5		ug/L	10.00		115	70-130			
Ethyl tertiary-butyl ether	10.7		ug/L	10.00		107	70-130			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52139 - 5030B										
Ethylbenzene	10.6		ug/L	10.00		106	70-130			
Hexachlorobutadiene	9.93		ug/L	10.00		99	70-130			
Hexachloroethane	9.67		ug/L	10.00		97	70-130			
Isopropylbenzene	11.8		ug/L	10.00		118	70-130			
Methyl tert-Butyl Ether	10.5		ug/L	10.00		105	70-130			
Methylene Chloride	10.6		ug/L	10.00		106	70-130			
Naphthalene	10.9		ug/L	10.00		109	70-130			
n-Butylbenzene	11.9		ug/L	10.00		119	70-130			
n-Propylbenzene	11.8		ug/L	10.00		118	70-130			
sec-Butylbenzene	12.0		ug/L	10.00		120	70-130			
Styrene	9.58		ug/L	10.00		96	70-130			
tert-Butylbenzene	11.3		ug/L	10.00		113	70-130			
Tertiary-amyl methyl ether	10.4		ug/L	10.00		104	70-130			
Tetrachloroethene	8.78		ug/L	10.00		88	70-130			
Tetrahydrofuran	11.2		ug/L	10.00		112	70-130			
Toluene	10.4		ug/L	10.00		104	70-130			
trans-1,2-Dichloroethene	11.8		ug/L	10.00		118	70-130			
trans-1,3-Dichloropropene	8.38		ug/L	10.00		84	70-130			
Trichloroethene	9.92		ug/L	10.00		99	70-130			
Trichlorofluoromethane	10.6		ug/L	10.00		106	70-130			
Trihalomethanes (Total)	38.6		mg/L							
Vinyl Acetate	9.27		ug/L	10.00		93	70-130			
Vinyl Chloride	10.9		ug/L	10.00		109	70-130			
Xylene O	10.4		ug/L	10.00		104	70-130			
Xylene P,M	20.1		ug/L	20.00		101	70-130			
Xylenes (Total)	30.5		mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0291*		mg/L	*0.02500*		*116*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0251*		mg/L	*0.02500*		*100*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0293*		mg/L	*0.02500*		*117*	*70-130*			
Surrogate: Toluene-d8	*0.0277*		mg/L	*0.02500*		*111*	*70-130*			
LCS Dup										
1,1,1,2-Tetrachloroethane	9.14		ug/L	10.00		91	70-130	2	25	
1,1,1-Trichloroethane	10.7		ug/L	10.00		107	70-130	5	25	
1,1,2,2-Tetrachloroethane	9.92		ug/L	10.00		99	70-130	7	25	
1,1,2-Trichloroethane	8.95		ug/L	10.00		90	70-130	7	25	
1,1-Dichloroethane	10.9		ug/L	10.00		109	70-130	5	25	
1,1-Dichloroethene	11.6		ug/L	10.00		116	70-130	7	25	
1,1-Dichloropropene	10.3		ug/L	10.00		103	70-130	6	25	
1,2,3-Trichlorobenzene	10.5		ug/L	10.00		105	70-130	19	25	
1,2,3-Trichloropropane	8.93		ug/L	10.00		89	70-130	12	25	
1,2,4-Trichlorobenzene	10.9		ug/L	10.00		109	70-130	14	25	
1,2,4-Trimethylbenzene	10.1		ug/L	10.00		101	70-130	5	25	
1,2-Dibromo-3-Chloropropane	8.67		ug/L	10.00		87	70-130	6	25	
1,2-Dibromoethane	9.39		ug/L	10.00		94	70-130	2	25	

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

8260B Volatile Organic Compounds

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch CL52139 - 5030B										
1,2-Dichlorobenzene	10.2		ug/L	10.00		102	70-130	3	25	
1,2-Dichloroethane	11.1		ug/L	10.00		111	70-130	5	25	
1,2-Dichloropropane	10.2		ug/L	10.00		102	70-130	5	25	
1,3,5-Trimethylbenzene	10.3		ug/L	10.00		103	70-130	11	25	
1,3-Dichlorobenzene	10.6		ug/L	10.00		106	70-130	1	25	
1,3-Dichloropropane	10.2		ug/L	10.00		102	70-130	1	25	
1,4-Dichlorobenzene	10.7		ug/L	10.00		107	70-130	0.9	25	
1,4-Dioxane - Screen	236		ug/L	200.0		118	0-332	50	200	
1-Chlorohexane	9.87		ug/L	10.00		99	70-130	4	25	
2,2-Dichloropropane	9.22		ug/L	10.00		92	70-130	5	25	
2-Butanone	54.7		ug/L	50.00		109	70-130	5	25	
2-Chlorotoluene	10.9		ug/L	10.00		109	70-130	0.9	25	
2-Hexanone	55.4		ug/L	50.00		111	70-130	5	25	
4-Chlorotoluene	11.1		ug/L	10.00		111	70-130	5	25	
4-Isopropyltoluene	10.3		ug/L	10.00		103	70-130	9	25	
4-Methyl-2-Pentanone	51.7		ug/L	50.00		103	70-130	7	25	
Acetone	53.3		ug/L	50.00		107	70-130	5	25	
Benzene	10.4		ug/L	10.00		104	70-130	6	25	
Bromobenzene	10.0		ug/L	10.00		100	70-130	1	25	
Bromochloromethane	10.3		ug/L	10.00		103	70-130	0.2	25	
Bromodichloromethane	11.0		ug/L	10.00		110	70-130	2	25	
Bromoform	7.64		ug/L	10.00		76	70-130	2	25	
Bromomethane	8.66		ug/L	10.00		87	70-130	4	25	
Carbon Disulfide	10.4		ug/L	10.00		104	70-130	3	25	
Carbon Tetrachloride	10.6		ug/L	10.00		106	70-130	0.09	25	
Chlorobenzene	9.79		ug/L	10.00		98	70-130	5	25	
Chloroethane	8.56		ug/L	10.00		86	70-130	4	25	
Chloroform	11.0		ug/L	10.00		110	70-130	4	25	
Chloromethane	8.82		ug/L	10.00		88	70-130	8	25	
cis-1,2-Dichloroethene	11.5		ug/L	10.00		115	70-130	2	25	
cis-1,3-Dichloropropene	9.24		ug/L	10.00		92	70-130	3	25	
Dibromochloromethane	9.06		ug/L	10.00		91	70-130	5	25	
Dibromomethane	9.77		ug/L	10.00		98	70-130	3	25	
Dichlorodifluoromethane	10.0		ug/L	10.00		100	70-130	2	25	
Diethyl Ether	10.3		ug/L	10.00		103	70-130	4	25	
Di-isopropyl ether	11.1		ug/L	10.00		111	70-130	3	25	
Ethyl tertiary-butyl ether	10.1		ug/L	10.00		101	70-130	6	25	
Ethylbenzene	10.1		ug/L	10.00		101	70-130	5	25	
Hexachlorobutadiene	10.5		ug/L	10.00		105	70-130	5	25	
Hexachloroethane	9.03		ug/L	10.00		90	70-130	7	25	
Isopropylbenzene	11.2		ug/L	10.00		112	70-130	5	25	
Methyl tert-Butyl Ether	9.99		ug/L	10.00		100	70-130	5	25	
Methylene Chloride	10.3		ug/L	10.00		103	70-130	3	25	
Naphthalene	9.20		ug/L	10.00		92	70-130	17	25	

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52139 - 5030B										
n-Butylbenzene	10.6		ug/L	10.00		106	70-130	11	25	
n-Propylbenzene	11.3		ug/L	10.00		113	70-130	5	25	
sec-Butylbenzene	10.7		ug/L	10.00		107	70-130	11	25	
Styrene	9.71		ug/L	10.00		97	70-130	1	25	
tert-Butylbenzene	10.5		ug/L	10.00		105	70-130	8	25	
Tertiary-amyl methyl ether	9.87		ug/L	10.00		99	70-130	5	25	
Tetrachloroethene	8.96		ug/L	10.00		90	70-130	2	25	
Tetrahydrofuran	9.50		ug/L	10.00		95	70-130	17	25	
Toluene	9.74		ug/L	10.00		97	70-130	6	25	
trans-1,2-Dichloroethene	11.8		ug/L	10.00		118	70-130	0.08	25	
trans-1,3-Dichloropropene	8.04		ug/L	10.00		80	70-130	4	25	
Trichloroethene	10.2		ug/L	10.00		102	70-130	3	25	
Trichlorofluoromethane	10.4		ug/L	10.00		104	70-130	2	25	
Trihalomethanes (Total)	38.7		mg/L							
Vinyl Acetate	9.04		ug/L	10.00		90	70-130	3	25	
Vinyl Chloride	11.4		ug/L	10.00		114	70-130	4	25	
Xylene O	10.4		ug/L	10.00		104	70-130	0.1	25	
Xylene P,M	19.7		ug/L	20.00		98	70-130	2	25	
Xylenes (Total)	30.1		mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0285*		mg/L	*0.02500*		*114*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0245*		mg/L	*0.02500*		*98*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0288*		mg/L	*0.02500*		*115*	*70-130*			
Surrogate: Toluene-d8	*0.0286*		mg/L	*0.02500*		*114*	*70-130*			
Batch CL52243 - 5030B										
Blank										
1,1,1,2-Tetrachloroethane	ND	0.0010	mg/L							
1,1,1-Trichloroethane	ND	0.0010	mg/L							
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,2-Trichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethene	ND	0.0010	mg/L							
1,1-Dichloropropene	ND	0.0020	mg/L							
1,2,3-Trichlorobenzene	ND	0.0010	mg/L							
1,2,3-Trichloropropane	ND	0.0010	mg/L							
1,2,4-Trichlorobenzene	ND	0.0010	mg/L							
1,2,4-Trimethylbenzene	ND	0.0010	mg/L							
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/L							
1,2-Dibromoethane	ND	0.0010	mg/L							
1,2-Dichlorobenzene	ND	0.0010	mg/L							
1,2-Dichloroethane	ND	0.0010	mg/L							
1,2-Dichloropropane	ND	0.0010	mg/L							
1,3,5-Trimethylbenzene	ND	0.0010	mg/L							
1,3-Dichlorobenzene	ND	0.0010	mg/L							
1,3-Dichloropropane	ND	0.0010	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52243 - 5030B										
1,4-Dichlorobenzene	ND	0.0010	mg/L							
1,4-Dioxane - Screen	ND	0.500	mg/L							
1-Chlorohexane	ND	0.0010	mg/L							
2,2-Dichloropropane	ND	0.0010	mg/L							
2-Butanone	ND	0.0100	mg/L							
2-Chlorotoluene	ND	0.0010	mg/L							
2-Hexanone	ND	0.0100	mg/L							
4-Chlorotoluene	ND	0.0010	mg/L							
4-Isopropyltoluene	ND	0.0010	mg/L							
4-Methyl-2-Pentanone	ND	0.0250	mg/L							
Acetone	ND	0.0100	mg/L							
Benzene	ND	0.0010	mg/L							
Bromobenzene	ND	0.0020	mg/L							
Bromochloromethane	ND	0.0010	mg/L							
Bromodichloromethane	ND	0.0006	mg/L							
Bromoform	ND	0.0010	mg/L							
Bromomethane	ND	0.0020	mg/L							
Carbon Disulfide	ND	0.0010	mg/L							
Carbon Tetrachloride	ND	0.0010	mg/L							
Chlorobenzene	ND	0.0010	mg/L							
Chloroethane	ND	0.0020	mg/L							
Chloroform	ND	0.0010	mg/L							
Chloromethane	ND	0.0020	mg/L							
cis-1,2-Dichloroethene	ND	0.0010	mg/L							
cis-1,3-Dichloropropene	ND	0.0004	mg/L							
Dibromochloromethane	ND	0.0010	mg/L							
Dibromomethane	ND	0.0010	mg/L							
Dichlorodifluoromethane	ND	0.0020	mg/L							
Diethyl Ether	ND	0.0010	mg/L							
Di-isopropyl ether	ND	0.0010	mg/L							
Ethyl tertiary-butyl ether	ND	0.0010	mg/L							
Ethylbenzene	ND	0.0010	mg/L							
Hexachlorobutadiene	ND	0.0006	mg/L							
Hexachloroethane	ND	0.0010	mg/L							
Isopropylbenzene	ND	0.0010	mg/L							
Methyl tert-Butyl Ether	ND	0.0010	mg/L							
Methylene Chloride	ND	0.0020	mg/L							
Naphthalene	ND	0.0010	mg/L							
n-Butylbenzene	ND	0.0010	mg/L							
n-Propylbenzene	ND	0.0010	mg/L							
sec-Butylbenzene	ND	0.0010	mg/L							
Styrene	ND	0.0010	mg/L							
tert-Butylbenzene	ND	0.0010	mg/L							
Tertiary-amyl methyl ether	ND	0.0010	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52243 - 5030B										
Tetrachloroethene	ND	0.0010	mg/L							
Tetrahydrofuran	ND	0.0050	mg/L							
Toluene	ND	0.0010	mg/L							
trans-1,2-Dichloroethene	ND	0.0010	mg/L							
trans-1,3-Dichloropropene	ND	0.0004	mg/L							
Trichloroethene	ND	0.0010	mg/L							
Trichlorofluoromethane	ND	0.0010	mg/L							
Trihalomethanes (Total)	ND	0.0010	mg/L							
Vinyl Acetate	ND	0.0050	mg/L							
Vinyl Chloride	ND	0.0010	mg/L							
Xylene O	ND	0.0010	mg/L							
Xylene P,M	ND	0.0020	mg/L							
Xylenes (Total)	ND	0.0020	mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0278*		mg/L	*0.02500*		*111*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0272*		mg/L	*0.02500*		*109*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0280*		mg/L	*0.02500*		*112*	*70-130*			
Surrogate: Toluene-d8	*0.0300*		mg/L	*0.02500*		*120*	*70-130*			
LCS										
1,1,1,2-Tetrachloroethane	8.99		ug/L	10.00		90	70-130			
1,1,1-Trichloroethane	11.1		ug/L	10.00		111	70-130			
1,1,2,2-Tetrachloroethane	10.4		ug/L	10.00		104	70-130			
1,1,2-Trichloroethane	10.0		ug/L	10.00		100	70-130			
1,1-Dichloroethane	11.1		ug/L	10.00		111	70-130			
1,1-Dichloroethene	12.0		ug/L	10.00		120	70-130			
1,1-Dichloropropene	10.3		ug/L	10.00		103	70-130			
1,2,3-Trichlorobenzene	11.8		ug/L	10.00		118	70-130			
1,2,3-Trichloropropane	9.97		ug/L	10.00		100	70-130			
1,2,4-Trichlorobenzene	11.8		ug/L	10.00		118	70-130			
1,2,4-Trimethylbenzene	10.6		ug/L	10.00		106	70-130			
1,2-Dibromo-3-Chloropropane	7.57		ug/L	10.00		76	70-130			
1,2-Dibromoethane	10.2		ug/L	10.00		102	70-130			
1,2-Dichlorobenzene	10.3		ug/L	10.00		103	70-130			
1,2-Dichloroethane	11.6		ug/L	10.00		116	70-130			
1,2-Dichloropropane	10.4		ug/L	10.00		104	70-130			
1,3,5-Trimethylbenzene	11.2		ug/L	10.00		112	70-130			
1,3-Dichlorobenzene	11.3		ug/L	10.00		113	70-130			
1,3-Dichloropropane	10.2		ug/L	10.00		102	70-130			
1,4-Dichlorobenzene	10.5		ug/L	10.00		105	70-130			
1,4-Dioxane - Screen	415		ug/L	200.0		207	0-332			
1-Chlorohexane	9.96		ug/L	10.00		100	70-130			
2,2-Dichloropropane	10.8		ug/L	10.00		108	70-130			
2-Butanone	55.6		ug/L	50.00		111	70-130			
2-Chlorotoluene	11.3		ug/L	10.00		113	70-130			
2-Hexanone	56.2		ug/L	50.00		112	70-130			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52243 - 5030B										
4-Chlorotoluene	11.1		ug/L	10.00		111	70-130			
4-Isopropyltoluene	10.4		ug/L	10.00		104	70-130			
4-Methyl-2-Pentanone	55.0		ug/L	50.00		110	70-130			
Acetone	55.9		ug/L	50.00		112	70-130			
Benzene	10.5		ug/L	10.00		105	70-130			
Bromobenzene	10.7		ug/L	10.00		107	70-130			
Bromochloromethane	9.92		ug/L	10.00		99	70-130			
Bromodichloromethane	10.6		ug/L	10.00		106	70-130			
Bromoform	7.45		ug/L	10.00		74	70-130			
Bromomethane	8.85		ug/L	10.00		88	70-130			
Carbon Disulfide	10.5		ug/L	10.00		105	70-130			
Carbon Tetrachloride	10.6		ug/L	10.00		106	70-130			
Chlorobenzene	10.2		ug/L	10.00		102	70-130			
Chloroethane	8.60		ug/L	10.00		86	70-130			
Chloroform	11.0		ug/L	10.00		110	70-130			
Chloromethane	9.56		ug/L	10.00		96	70-130			
cis-1,2-Dichloroethene	11.4		ug/L	10.00		114	70-130			
cis-1,3-Dichloropropene	9.69		ug/L	10.00		97	70-130			
Dibromochloromethane	8.81		ug/L	10.00		88	70-130			
Dibromomethane	9.89		ug/L	10.00		99	70-130			
Dichlorodifluoromethane	9.90		ug/L	10.00		99	70-130			
Diethyl Ether	11.0		ug/L	10.00		110	70-130			
Di-isopropyl ether	11.0		ug/L	10.00		110	70-130			
Ethyl tertiary-butyl ether	10.4		ug/L	10.00		104	70-130			
Ethylbenzene	10.0		ug/L	10.00		100	70-130			
Hexachlorobutadiene	10.9		ug/L	10.00		109	70-130			
Hexachloroethane	9.33		ug/L	10.00		93	70-130			
Isopropylbenzene	12.2		ug/L	10.00		122	70-130			
Methyl tert-Butyl Ether	10.8		ug/L	10.00		108	70-130			
Methylene Chloride	11.2		ug/L	10.00		112	70-130			
Naphthalene	10.6		ug/L	10.00		106	70-130			
n-Butylbenzene	12.0		ug/L	10.00		120	70-130			
n-Propylbenzene	11.4		ug/L	10.00		114	70-130			
sec-Butylbenzene	11.5		ug/L	10.00		115	70-130			
Styrene	9.08		ug/L	10.00		91	70-130			
tert-Butylbenzene	11.1		ug/L	10.00		111	70-130			
Tertiary-amyl methyl ether	10.2		ug/L	10.00		102	70-130			
Tetrachloroethene	8.48		ug/L	10.00		85	70-130			
Tetrahydrofuran	9.42		ug/L	10.00		94	70-130			
Toluene	10.4		ug/L	10.00		104	70-130			
trans-1,2-Dichloroethene	11.6		ug/L	10.00		116	70-130			
trans-1,3-Dichloropropene	8.38		ug/L	10.00		84	70-130			
Trichloroethene	9.54		ug/L	10.00		95	70-130			
Trichlorofluoromethane	10.2		ug/L	10.00		102	70-130			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52243 - [CALC]										
Trihalomethanes (Total)	37.8		mg/L							
Vinyl Acetate	9.00		ug/L	10.00		90	70-130			
Vinyl Chloride	11.2		ug/L	10.00		112	70-130			
Xylene O	10.5		ug/L	10.00		105	70-130			
Xylene P,M	19.7		ug/L	20.00		98	70-130			
Xylenes (Total)	30.2		mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0288*		mg/L	*0.02500*		*115*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0254*		mg/L	*0.02500*		*102*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0291*		mg/L	*0.02500*		*116*	*70-130*			
Surrogate: Toluene-d8	*0.0271*		mg/L	*0.02500*		*108*	*70-130*			
LCS Dup										
1,1,1,2-Tetrachloroethane	9.13		ug/L	10.00		91	70-130	2	25	
1,1,1-Trichloroethane	10.1		ug/L	10.00		101	70-130	9	25	
1,1,2,2-Tetrachloroethane	9.88		ug/L	10.00		99	70-130	5	25	
1,1,2-Trichloroethane	9.53		ug/L	10.00		95	70-130	5	25	
1,1-Dichloroethane	10.0		ug/L	10.00		100	70-130	11	25	
1,1-Dichloroethene	11.1		ug/L	10.00		111	70-130	8	25	
1,1-Dichloropropene	10.0		ug/L	10.00		100	70-130	3	25	
1,2,3-Trichlorobenzene	10.2		ug/L	10.00		102	70-130	14	25	
1,2,3-Trichloropropane	9.53		ug/L	10.00		95	70-130	5	25	
1,2,4-Trichlorobenzene	10.5		ug/L	10.00		105	70-130	12	25	
1,2,4-Trimethylbenzene	10.0		ug/L	10.00		100	70-130	5	25	
1,2-Dibromo-3-Chloropropane	9.00		ug/L	10.00		90	70-130	17	25	
1,2-Dibromoethane	9.63		ug/L	10.00		96	70-130	6	25	
1,2-Dichlorobenzene	10.1		ug/L	10.00		101	70-130	1	25	
1,2-Dichloroethane	10.1		ug/L	10.00		101	70-130	14	25	
1,2-Dichloropropane	10.2		ug/L	10.00		102	70-130	1	25	
1,3,5-Trimethylbenzene	10.7		ug/L	10.00		107	70-130	5	25	
1,3-Dichlorobenzene	10.5		ug/L	10.00		105	70-130	7	25	
1,3-Dichloropropane	9.70		ug/L	10.00		97	70-130	5	25	
1,4-Dichlorobenzene	10.3		ug/L	10.00		103	70-130	2	25	
1,4-Dioxane - Screen	283		ug/L	200.0		141	0-332	38	200	
1-Chlorohexane	9.95		ug/L	10.00		100	70-130	0.1	25	
2,2-Dichloropropane	9.92		ug/L	10.00		99	70-130	8	25	
2-Butanone	53.1		ug/L	50.00		106	70-130	5	25	
2-Chlorotoluene	11.0		ug/L	10.00		110	70-130	2	25	
2-Hexanone	55.2		ug/L	50.00		110	70-130	2	25	
4-Chlorotoluene	10.9		ug/L	10.00		109	70-130	2	25	
4-Isopropyltoluene	10.1		ug/L	10.00		101	70-130	3	25	
4-Methyl-2-Pentanone	53.5		ug/L	50.00		107	70-130	3	25	
Acetone	51.8		ug/L	50.00		104	70-130	8	25	
Benzene	10.6		ug/L	10.00		106	70-130	0.8	25	
Bromobenzene	9.75		ug/L	10.00		98	70-130	9	25	
Bromochloromethane	9.99		ug/L	10.00		100	70-130	0.7	25	

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52243 - 5030B										
Bromodichloromethane	9.96		ug/L	10.00		100	70-130	6	25	
Bromoform	7.78		ug/L	10.00		78	70-130	4	25	
Bromomethane	9.81		ug/L	10.00		98	70-130	10	25	
Carbon Disulfide	9.73		ug/L	10.00		97	70-130	7	25	
Carbon Tetrachloride	9.15		ug/L	10.00		92	70-130	15	25	
Chlorobenzene	10.1		ug/L	10.00		101	70-130	0.6	25	
Chloroethane	8.65		ug/L	10.00		86	70-130	0.6	25	
Chloroform	9.85		ug/L	10.00		98	70-130	11	25	
Chloromethane	9.08		ug/L	10.00		91	70-130	5	25	
cis-1,2-Dichloroethene	10.3		ug/L	10.00		103	70-130	10	25	
cis-1,3-Dichloropropene	9.08		ug/L	10.00		91	70-130	6	25	
Dibromochloromethane	8.41		ug/L	10.00		84	70-130	5	25	
Dibromomethane	9.14		ug/L	10.00		91	70-130	8	25	
Dichlorodifluoromethane	9.93		ug/L	10.00		99	70-130	0.3	25	
Diethyl Ether	10.1		ug/L	10.00		101	70-130	8	25	
Di-isopropyl ether	10.5		ug/L	10.00		105	70-130	5	25	
Ethyl tertiary-butyl ether	10.2		ug/L	10.00		102	70-130	2	25	
Ethylbenzene	10.3		ug/L	10.00		103	70-130	2	25	
Hexachlorobutadiene	9.86		ug/L	10.00		99	70-130	10	25	
Hexachloroethane	8.90		ug/L	10.00		89	70-130	5	25	
Isopropylbenzene	11.3		ug/L	10.00		113	70-130	7	25	
Methyl tert-Butyl Ether	9.66		ug/L	10.00		97	70-130	11	25	
Methylene Chloride	10.6		ug/L	10.00		106	70-130	6	25	
Naphthalene	9.07		ug/L	10.00		91	70-130	16	25	
n-Butylbenzene	10.8		ug/L	10.00		108	70-130	11	25	
n-Propylbenzene	10.9		ug/L	10.00		109	70-130	5	25	
sec-Butylbenzene	10.5		ug/L	10.00		105	70-130	9	25	
Styrene	9.66		ug/L	10.00		97	70-130	6	25	
tert-Butylbenzene	10.4		ug/L	10.00		104	70-130	6	25	
Tertiary-amyl methyl ether	9.51		ug/L	10.00		95	70-130	7	25	
Tetrachloroethene	8.32		ug/L	10.00		83	70-130	2	25	
Tetrahydrofuran	9.60		ug/L	10.00		96	70-130	2	25	
Toluene	9.84		ug/L	10.00		98	70-130	5	25	
trans-1,2-Dichloroethene	10.6		ug/L	10.00		106	70-130	9	25	
trans-1,3-Dichloropropene	8.34		ug/L	10.00		83	70-130	0.5	25	
Trichloroethene	9.71		ug/L	10.00		97	70-130	2	25	
Trichlorofluoromethane	9.31		ug/L	10.00		93	70-130	9	25	
Trihalomethanes (Total)	36.0		mg/L							
Vinyl Acetate	8.78		ug/L	10.00		88	70-130	2	25	
Vinyl Chloride	10.9		ug/L	10.00		109	70-130	3	25	
Xylene O	10.2		ug/L	10.00		102	70-130	3	25	
Xylene P,M	20.8		ug/L	20.00		104	70-130	5	25	
Xylenes (Total)	30.9		mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0276*		mg/L	*0.02500*		*110*	*70-130*			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CL52243 - 5030B										
Surrogate: 4-Bromofluorobenzene	*0.0253*		mg/L	*0.02500*		*101*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0272*		mg/L	*0.02500*		*109*	*70-130*			
Surrogate: Toluene-d8	*0.0278*		mg/L	*0.02500*		*111*	*70-130*			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave ESS Laboratory Work Order: 1512488

Notes and Definitions

U	Analyte included in the analysis, but not detected
CD-	Continuing Calibration %Diff/Drift is below control limit (CD-).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512488

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

Sample and Cooler Receipt Checklist

Client: Resource Controls
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 15120488
Date Project Due: 12/24/15
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present?	* No	10. Are the samples properly preserved?	Yes
Air No.:		11. Proper sample containers used?	Yes
2. Were Custody Seals Present?	No	12. Any air bubbles in the VOA vials?	No
3. Were Custody Seals Intact?	N/A	13. Holding times exceeded?	No
4. Is Radiation count < 100 CPM?	Yes	14. Sufficient sample volumes?	Yes
5. Is a cooler present?	Yes	15. Any Subcontracting needed?	No
Cooler Temp: **3.3**		16. Are ESS labels on correct containers?	**Yes|No**
Iced With: **Ice**		17. Were samples received intact?	**Yes|No**
6. Was COC included with samples?	Yes	ESS Sample IDs: _____	
7. Was COC signed and dated by client?	Yes	Sub Lab: _____	
8. Does the COC match the sample	Yes	Analysis: _____	
9. Is COC complete and correct?	Yes	TAT: _____	

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?:_____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	40 ml - VOA	3	HCL
2	Yes	40 ml - VOA	3	HCL
3	Yes	40 ml - VOA	3	HCL
4	Yes	40 ml - VOA	3	HCL
5	Yes	40 ml - VOA	3	HCL
6	Yes	40 ml - VOA	3	HCL
7	Yes	40 ml - VOA	3	HCL

Completed By: GEM Date/Time: 12/17/15 1830
Reviewed By: MCF Date/Time: 12/17/15 1847

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue,Cranston RI 02910-2211
Tel. (401)461-7181 Fax (401)461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1512488

Turn Time 5-day Standard Other

Regulatory State: MA RI CT NH NJ NY ME Other

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other

Reporting Limits - RI-6-A

Electonic Deliverables (*Excel) Access (PDF)

Co. Name: Resource Controls	Project #: 7131A	Project Name: Bay Spring, Barrington	
Contact Person: Julie Freshman	Proj. Location: Barrington, RI		
Address: 474 Broadway	City, State: Pawtucket, RI	Zip: 02860	PO #: 7131A-11
Tel: 401-728-6660	email: jfreshman@resourcecontrols.com		

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: VOC xBTEX
1	12/17/15	9:50	G	GW	MW-107	HCl	3	V	40ml	X
2	12/17/15	12:45	G	GW	MW-103	HCl	3	V	40ml	X
3	12/17/15	10:45	G	GW	MW-101	HCl	3	V	40ml	X
4	12/17/15	10:45	G	GW	MW-104	HCl	3	V	40ml	X
5	12/17/15	11:50	G	GW	MW-3	HCl	3	V	40ml	X
6	12/17/15	12:30	G	GW	MW-105	HCl	3	V	40ml	X
7	12/17/15	13:55	G	GW	MW-5	HCl	3	V	40ml	X

Cooler Present Yes No

Seals Intact Yes No NA:

Cooler Temperature: 3.3° 12-17-15 13:35

Internal Use Only
[ ] Pickup
[ ] Technician

Sampled by: BPC/TSC

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
12-17-15 13:35	12-17-15 13:35	12-17-15 16:53	12/17/15 1830

* By circling MA-MCP, client acknowledges sampels were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

Report Method Blank & Laboratory Control Sample Results

CERTIFICATE OF ANALYSIS

Julie Freshman
Resource Controls
474 Broadway
Pawtucket, RI 02860-1377

RE: Bay Spring Ave (7131A)
ESS Laboratory Work Order Number: 1512489

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 9:42 am, Dec 24, 2015

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512489

SAMPLE RECEIPT

The following samples were received on December 17, 2015 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
1512489-01	HB-1 0-6in	Soil	8082A

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512489

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512489

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave
Client Sample ID: HB-1 0-6in
Date Sampled: 12/17/15 11:25
Percent Solids: 68
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1512489
ESS Laboratory Sample ID: 1512489-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 12/18/15 17:05

8082A Polychlorinated Biphenyls (PCB)

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Aroclor 1016	ND (0.0763)		8082A		1	12/22/15 2:36		CL51712
Aroclor 1221	ND (0.0763)		8082A		1	12/22/15 2:36		CL51712
Aroclor 1232	ND (0.0763)		8082A		1	12/22/15 2:36		CL51712
Aroclor 1242	ND (0.0763)		8082A		1	12/22/15 2:36		CL51712
Aroclor 1248	ND (0.0763)		8082A		1	12/22/15 2:36		CL51712
Aroclor 1254	ND (0.0763)		8082A		1	12/22/15 2:36		CL51712
Aroclor 1260	**0.294** (0.0763)		8082A		1	12/22/15 2:36		CL51712
Aroclor 1262	ND (0.0763)		8082A		1	12/22/15 2:36		CL51712
Aroclor 1268	ND (0.0763)		8082A		1	12/22/15 2:36		CL51712

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*90 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*92 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*94 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*86 %*		*30-150*

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512489

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8082A Polychlorinated Biphenyls (PCB)										
Batch CL51712 - 3540C										
Blank										
Aroclor 1016	ND	0.0500	mg/kg wet							
Aroclor 1221	ND	0.0500	mg/kg wet							
Aroclor 1232	ND	0.0500	mg/kg wet							
Aroclor 1242	ND	0.0500	mg/kg wet							
Aroclor 1248	ND	0.0500	mg/kg wet							
Aroclor 1254	ND	0.0500	mg/kg wet							
Aroclor 1260	ND	0.0500	mg/kg wet							
Aroclor 1262	ND	0.0500	mg/kg wet							
Aroclor 1268	ND	0.0500	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0198*		mg/kg wet	*0.02500*		*79*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0184*		mg/kg wet	*0.02500*		*74*	*30-150*			
LCS										
Aroclor 1016	0.470	0.0500	mg/kg wet	0.5000		94	40-140			
Aroclor 1260	0.522	0.0500	mg/kg wet	0.5000		104	40-140			
Surrogate: Decachlorobiphenyl	*0.0245*		mg/kg wet	*0.02500*		*98*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0268*		mg/kg wet	*0.02500*		*107*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0222*		mg/kg wet	*0.02500*		*89*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0220*		mg/kg wet	*0.02500*		*88*	*30-150*			
LCS Dup										
Aroclor 1016	0.488	0.0500	mg/kg wet	0.5000		98	40-140	4	30	
Aroclor 1260	0.529	0.0500	mg/kg wet	0.5000		106	40-140	1	30	
Surrogate: Decachlorobiphenyl	*0.0247*		mg/kg wet	*0.02500*		*99*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0264*		mg/kg wet	*0.02500*		*106*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0228*		mg/kg wet	*0.02500*		*91*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0227*		mg/kg wet	*0.02500*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512489

Notes and Definitions

U	Analyte included in the analysis, but not detected
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: Resource Controls
Client Project ID: Bay Spring Ave

ESS Laboratory Work Order: 1512489

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

Sample and Cooler Receipt Checklist

Client: Resource Controls
Client Project ID: _____
Shipped/Delivered Via: ESS Courier

ESS Project ID: 15120489
Date Project Due: 12/24/15
Days For Project: 5 Day

Items to be checked upon receipt:

1. Air Bill Manifest Present?	* No	10. Are the samples properly preserved?	Yes
Air No.:		11. Proper sample containers used?	Yes
2. Were Custody Seals Present?	No	12. Any air bubbles in the VOA vials?	N/A
3. Were Custody Seals Intact?	N/A	13. Holding times exceeded?	No
4. Is Radiation count < 100 CPM?	Yes	14. Sufficient sample volumes?	Yes
5. Is a cooler present?	Yes	15. Any Subcontracting needed?	No
Cooler Temp: **3.3**		16. Are ESS labels on correct containers?	Yes No
Iced With: **Icepacks**		17. Were samples received intact?	Yes No
6. Was COC included with samples?	Yes	ESS Sample IDs: _____	
7. Was COC signed and dated by client?	Yes	Sub Lab: _____	
8. Does the COC match the sample	Yes	Analysis: _____	
9. Is COC complete and correct?	Yes	TAT: _____	

18. Was there need to call project manager to discuss status? If yes, please explain.

_____

_____

_____

Who was called?: _____ By whom? _____

Sample Number	Properly Preserved	Container Type	# of Containers	Preservative
1	Yes	8 oz Soil Jar	2	NP

Completed By: GEM Date/Time: 12/17/15 1845
Reviewed By: MEK Date/Time: 12/17/15 1850

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 1

Turn Time 5-day Standard Other _____
If faster than 5 days, prior approval by laboratory is required # _____

State where samples were collected from:
MA RI CT NH NJ NY ME Other _____

Is this project for any of the following:
MA-MCP Navy USACE Other _____

Reporting Limits: RI-RES DEC

ESS LAB PROJECT ID: 1512489

Electronic Deliverable X Yes ___ No

Format: Excel X Access ___ PDF X Other _____

Co. Name	Project #	Project Name (20 Char. or less)
Resource Consults	7131A	Bay Springs, Barrington

Contact Person	Address
Julie Freshman	474 Broadway

City	State	Zip	PO#
Pawtucket	RI	02860	7131A-11

Telephone #	Fax #	Email Address
401-724-6660		JFreshman@resourceconsults.com

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	Circle and/or Write Required Analysis
1	12/17/15	11:25		X	S	HB-1 (0-6")	1	2	G	8082 PCB X

Circle and/or Write Required Analysis: 8260 VOA; 524.2; 624; 8021 MTBE/BTEX; VPH w/targets; 8015 GRO; 8100 TPH; 8015 DRO; EPH w/PAHs; EPH w/o PAHs; EPH 4 Diesel; 608 PCB; 608 Pesticides; 8081 Pesticides; PAH 8270; 8270 SVOA; 625; TAL23; PP13; RCRA8; RCRA5; TCLP-RCRA8; NBC7; MCP-METALS (13) w/Hg; MCP-METALS (13)

Container Type: P-Poly G-Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ~~Yes~~ ___ No

Seals Intact ___ Yes ___ No NA: ___

Cooler Temp: 3.3° 12-17-15 13:35

Internal Use Only
[~~]~~ Pickup
[ ] Technicians _____

Preservation Code: 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- _____

Sampled by: BSC

Comments:

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	12-17-15 13:35	[signature]	12-17-15 13:36	[signature]	12-17-15 16:53	[signature]	12/17/15 1830
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/26/04 B